(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1739 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

CTCGCAGCCG	NYAKYCGWAA	ATGGTCCAAT	GTACTCCATC	CATCACTGCA	TCAACCTTAC	60
CTGTTTCTTC	GTTCGTACGA	TGATCTTTCA	CCATTGAGTA	TGGATGGAAA	ACATATGATC	120
TAATTTGGCT	TCCCCAGCCG	ATTTCTTTTT	GTTCGCCACG	AATTTCAGCC	ATTTCACGTG	180
CCTGCTCTTC	CAATTTTAAT	TGATATAATT	TAGACTTTAA	CATTTTCATA	GCTGCTTCAC	240
GGTTTTTAAT	TTGAGAACGT	TCATTTTGGT	TATTAACAAC	TATACCTGAG	GGGTGGTGGG	300
TAATTCGTAT	TGCCGATTCA	GTTTTGTTAA	TATGCTGACC	ACCTGCACCA	GAAGCTCTGA	360
ATGTATCAAC	TGTAATATCA	TCCGGATTGA	TTTCAATCTC	TATTTCATCA	TTATTAAAAT	420
CTGGAATAAC	GTCGCATGAT	GCAAATGATG	TATGACGACG	TCCTGATGAA	TCAAATGGAG	480
AAATTCGTAC	TAGTCGGTGT	ACACCTTTTT	CAGCTTTTAA	ATAACCATAA	GCATTATGCC	540
CTTTGATGAG	CAATGTTACA	CTTTTAATCC	CCGCTTCATC	CCCAGGTAGA	TAATCAACAG	600
TTTCAACTTT	AAAGCCTTTC	TTCTCAACAA	TAACGTTGAT	ACATTCTAAA	TAGCATATTA	660
GCCCAATCTT	GAGACTCCGT	GCCACCTGCA	CCAGGATGTA	ACTCTAGAAT	TGCGTTATTG	720
GCATCGTGAG	GCCCATCTAA	TAATAATTGC	AATTCGTATT	CATCCACTTT	AGCCTTAAAA	780
TTAATGACCT	CTTGCTCTAA	GTCTTCTTTC	ATTTCCTTCA	TCAAATTCTT	CTTGTAATAA	840
ATCCCAAGTA	GCATCCATGT	CATCTACTTC	TGCTTGTAGT	GTTTTATAAC	CATTAACTAT	900
TGCTTTTAAC	GCATTATTTT	TATCTATAAT	ATCTTGCGCT	TTCGTTTGGT	TATCCCAAAA	960
ATTAGGTTCT	GCCATCATTT	CTTCATATTC	TTGAATATTA	GTTTCTTTGT	TCTCTAAGTC	1020
AAAGAGACCC	CCTAATTTGT	GTTAAATCTT	GATTATACTT	ATCTATATTT	CGTTTGATTT	1080
CTGATAATTC	CATAGCATTC	GCTCCTATTT	ATATTTCAAT	TCAAGTCATT	GATTTGCATC	1140
TTTTATAATG	CTAAATTTTA	ACATAATTTT	GTTAAATAAC		AATATAAGCA	1200
CACTGACAAT	TAGTTTATGC	ATTTATTGTT	TAAAAAWGCA	GTACATTTAT	GCATCGACAT	1260
ATGCCTAAAC	CGATTTTTTA	AAACTAAGTA	CATAACAACG	TTTAACAACT	TCTTCACATT	1320
TTTTAAAGTA	TTTAACGCTT	GTAAAATAAA	AAGACTCCTC	CCATAACACA	AACTATAGGT	1380
GTTTAATTGG	AAGGAGTTAT	TTTATATCAT	TTATTTTCCA	TGGCAATTTT	TGAATTTTTT	1440
ACCACTACCA	CATGGACAAT	CATCGTTACG	ACCAACTTGA	TCGCCTTTAA	+	1500
CGGTTTCACT	TTTŢCTTTAC	CATCTTCAGC	TGAAACGTGC	TTCGCTTCAC	CAAACTCTGT	1560
TGTTTTTTCA	CGTTCAATAT	TATCTTCAAC	TTGTACTACA	GATTTTAAAA	TGAATTTACA	1620
AGTATCTTCT	TCAATATTTT	GCATCATGAT	ATCAAATAAT	TCATGACCTT	CATTTTGATA	1680
GTCACGTAAT	GGATTTTGTT	GTGCATAAGA	ACGTAAGTGA	ATACCTTGAC	GTAATTGAT	1739

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

CTGCAGGTCG ATCTGCATCT TGATGTTTAT GAAATTCGAG TTGATCTAGT AATTAAATAA 60 CCAGCTAATA ATGACACTAC ATCAGKAAGA ATAATCCACT CGTTATGGAA ATACTCTTTA 120 TAGATTGAGG CACCAATTAA AATTAATGTC AGAATAGTAC CGACCCATTT ACTTCTTGTT 180 ATTACACTAA ATAATACTAC CAAGACACAT GGAAAGAATG CTGCGCTAAA ATACCATATC ATTCATTTC CTCTTTTCTT TTATTTAAAA TGTTCATGGT TGTTTCTCTT AATTCTGTTC 240 300 TAGGTATAAA GTTTTCAGTC AACATTTCTG GAATGATATT ATTAATAAAA TCTTGTACAG 360 ATGCTAAATG GTCAAATTGA ATAATTGTTT CTAGACTCAT TTCATAAATT TCGAAAAATA ATTCTTCGGG ATTACGKTTT TGTATTTCTC CAAATGTTTC ATAAAGCAAA TCAATTTTAT CAGCAACTGA AAGTATTTGG CCTTCTAATG AATCATCTTT ACCTTCTTGC AGTCGTTGCT 420 480 540 600 TATAAACATC TCTATATTGT AATGGAATTT CTTCTTCAAT AAAGGTCTCT ACCATTTCTT CTTCAACTTG CGAAAATAAT TTTTTTAATT CACTACTCGC ATATTTAACA GGTGTTTTTA
TATCACCAGT AAACACTTCG GSGAAATCAT GATTTAATG TTTTCATAT AAGCTTTCC
AATTAAYCTT TCTCCATGAT ATTCTTCAAC TGTTGCTAGA TATTGTGCAA TTTTAGTTAC 660 720 780 TTTAAAGGAG TGTGCTGCAA CATTGTGTTC AAAATATTTA AATTTTCCAG GTAATCTTAT 840 900 960 TAAATATCTT CTTTATATAA CTCTGATTAA ATGATACCAA AAAATCCTCT CAACCTGTTA 1020 CTTAAACAGG CTAAGAGGGT AGTCTTGTCT TGATATATTA CTTAGTGGAT GTAATTATAT TTTCCTGGAT TTAAAATTGT TCTTGAAGAT TTAACATTAA ATCCAGCATA GTTCATTTTC AGAAACAGTA ATTGTTCCMT TTAGGGTTTA CAGATTCAAC AACACCAACA TGTCCATATG GACCAGCAGC TGTTTGGAAA ATAGCGCCAA CTTCTGGKGT TTTATCTACT TTTAAATCCT GCAACTTTTG CTGCGTAATT CCAGTTATTT GCATTGCCC ATAAACTTCC TATACTTCTA CCTAATTGTG CACGACGATC GAAAGCATAA TATGTGCAGT TTCCATAAGC ATATAAGTTT CCTCTGTTAG CAACTGATTT ATTGTAGTTA TGTGCAACAG GTACAGTTGG TACTGATTTT TGTACTTGAG CAGGTTTGTA TGCTACATTA ACTGTCTTAG TTACTGCTTG CTTAGGTGCT
TGCTTAACTA CTACTTTTTT AGATGCTTGT TGTACAGGTT GTTTTACTAC CTTTTTAGCT
TGGCTTGCTT TTCTTACTGG TGATTTAACC GCTTTAGTTT GTTTCACTTT ATTTTGAGGC ACAAGTGAAA TCACGTCACC AGGAAAAATT AAAGGTGTTA CACCAGGATT GTATTGAATA TAATTGATTC AACGTTAAGT GATGCTCTTA AAGCAATCTT ATATTAATGA ATCGCCAGCA ACTACTGTWT AAGTTGTCGG TGATTGCGTT TGTGCTTGAA CATTTGATAC ATAATTATGT TGAACAGGTG TTTTTACTTG TGTGCCATGT TGTTGTGCAT GTGCKGCATT ATTTAAAGCK AAAAAAGCTA ACACTGACGA AACCGTCACT GWAAGARART TTTTCATCTK GCTGTCATTC CTTTGCTGTW AGTATTTTAA GTTATGCAAA TACTATAGCA CAATACATTT TGTCCAAAAG CTAATTGTTA TAACGANGTA ATCAAATGGT TAACAANATN AANAGAAGAC AACCGTNTAT CATAGNGGNA AANGTAGNCA TACCATGNAA TTGAGAACGT TNTCAANAAN TAANTCAATA CCNTGAAAAT CGCCATAGGN AATATTACNA AATGCACACT GCATATGNTG NTTTAACAAA CACNACTTT NANAAATATA NTCTAACTCT ATCTACCGAA TTGNACTTAA ATATTCATAA ANAAATNATA TTCNAAAATC TAATTTACAA TTTATTTAGC TACCTTTAAA AAANCNNAAA ACCGACGNCC TTTTAGAGCC TCGGTTTTTA NATATATNTT AATCGTGCGA CATTGTCTGT TTTNAATNTG ATTCGACTCT AGNGGATC

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2494 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

AATCATTTTA AATGATTGAT CAAGATGGTA TGGCGAAAGA CCAACGTAAT CACTTAATTC TTGCAAATTG AAAGGCTCTA ATAAACGATC TTCAATATAA ACAATTGCCT GTTGTATTTG AAATATAATT TCATAATATA GTCTAGAAAA AAAGCGAATG ATAGAACAAT TGATTTACTT GATTCGTAAT CAATCCTTGT CATTCGCTCA TTTATTTTTG TTTAACATGT GCGTTTTAAT TCAATTATTG AATATCGTCC CACCAATGGT TACCATCACG AGCAAGTAGT AAATCACTTT CTAATGGACC ATTAGTACCT GATTCATAGT TAGGGAATTC TGGATCAACC ATATTCCATT CATCTTGGAA TTGCATCAAC AAATTTCCAT GTTGATTTTA ATTCTTCCCA GTGCGTGAAG TTAGTGGCAT CACCTTTAAG ACAATCAAAT AATAGATTTT CATATGCATC TACAGTATTC ATTTTATCTT GAGCGCTCAT TGAGTAAGAC AATTGGACAG GTTCTGTTTC GATACCTTGT GTWTTTTTCT TAGCATTTAR ATGTAAAGAT ACACCTTCAT TAGGTTGGAT ATTGATTANT AATAGGTTTG AATCTAACAG TTTATCAGTT TCATAGTATA AGTTCATTGG TACTTCTTTA AATTCAACGA CAACTTGAAT TGTTTTAGAT TTCATACGTT TACCAGTACG GATATAGAAT GGTACACCAG CCCATCTAAA GTTATCAATT GTTAATTTAC CTGAAACAAA GGTAGGTGTG TTAGAGTCAT CTGCAACGCG ATCTTCATCA CGGTATGCTT TAACTTGTTT ACCATCGATA TAGCCTTCGC CATATTGACC ACGAACAAAG TTCTTTTTAA CATCTTCAGA TTGGAAATGA CGCAGTGATT TAAGTACTTT TAACTTTCTC AGCACGGATA TCTTCACTAT TTAAACTAAT AGGTGCTTCC ATAGCTAATA ATGCAACCAT TTGTAACATG TGGTTTTGCA CCATATCTTT TAGCGCGCCA CTTGATTCAT AATAACCACC ACGATCTTCA ACACCTAGTA TTTCAGAAGA TGTAACYYGG ATGTTTGAAA TATATTTGTT ATTCCATAAT GGTTCAAACA TCGCATTCGC AAAACGTAAT ACCTCGATAT TTTGAACCAT GTCTTTTCCT AAATAGTGGT CMATACGRTA AATTTCTTCT TCTTTAAATG ATTTACGAAT TTGATTGTT AATGCTTCGG CTGATTTTAA ATCACTACCG AATGGTTTTT CGATAACAAG GCGTTTAAAT CCTTTTGTAT CAGTAAGACC AGAAGATTTT AGATAATCAG AAATAACGCC AAAGAATTGT GGTGCCATTG CTAAATAGAA TAGTCGATTA CCTTYTAATT CAAATTGGCT ATCTAATTCA TTACTAAAAT CTAGTAATTT CTTGATAGCT TTCTTCATTA CTAACATCAT GTCTATGATA GAAGACATGT TCCATAAACG CGTCAATTTT GTTTGTATCT TTWACGTGCT TTTGAATTGA TGATTTTAAC TTGATTACGG AAATCATCAT TAGTAATGTC ACGACGTCCA ATACCGATGA TGGCAATATG TTCATCTAAA TTGTCTTGTT GGTAGAGATG GAATATTGAT GGAAACAACT TACGATGGCT TAAGTCACCA GTTGCACCAA AGATTGTGAT TAAACATGGG ATGTGTTTGT TTTTAGTACT CAAGATTAAA ACCTCAATTC WYMCATTAGA TATATSATTT ATTATKAYMM GATAATCCAT TTCAGTAGGT CATACMATAT GYTCGACTGT ATGCAGTKTC TTAAATGAAA TATCGATTCA TGTATCATGT TTAATGTGAT AATTATTAAT GATAAGTATA ACGTAATTAT CAAAATTTAT ATAGTTATGT

CTAACGTTAA AGTTAGAAAA ATTAACTAGC AAGTATAAATT AAAACTAAAT TGATACAAAT TGGCCATATAT GGAAGTTACA TTTTTTGGAA CAATCACACAAGC AATCACACACACACACACACACACACACACACACACAC	TTATGATAA AATGAATTGA AGAAAAGGAG 2160 GAGTGCAGG TTTGCCTACA AAAGAGAAA 2220 ATATTCCAA TTCCATATGG CTTTTCGACG 2280 TCATGCAAT TAAATTAGGA AAAGTGACAC 2340 TATTTTTGG TTTGCCAGGA TTACTTTCTA 2400 GCTTACATT GGTTGGACCA AAAGGAATTA 2460			
(2) INFORMATION FOR SEQ ID NO: 4:				
(i) SEQUENCE CHARACTERISTICS:				
(A) LENGTH:(B) TYPE:(C) STRANDEDNESS:(D) TOPOLOGY:	400 base pairs nucleic acid single linear			
(xi) SEQUENCE DESCRIPTION: SEQ	ID NO: 4:			
AAATAATCTA AAAATTGGTA GTNCTCCTTC A TTNAACTNNT TCCGTGTTTC TTTTTCTAAG T TGTTTTATCT TTTAAATCTA ACACTGAGTG A TTTATGGAAT CCAGTATGTT CAAATCCTAA G ACCAGCATTA CCTGTAATCT CGCCATCATG A GNTATGTAGG TATAGNCAAC GATGTTTTTT A AGTGTACGAG TNCTTGATTT TCATANTCAA T	CCATCCATA TTTTNAATGA TGTCATCTGC 120 TAACGGATT TGTAGCACAG GATCAAATCC 180 TTTACTCATT TTATCAAAGA ACCAATCATT 240 TTCAAGTAT TGATATGGTA AATATGGATC 300 ACATATTTT GGATAATTCA TTAAAGNAAA 360			
(2) INFORMATION FOR SEQ ID NO: 5:				
(i) SEQUENCE CHARACTERISTICS:	·			
(A) LENGTH: (B) TYPE: (C) STRANDEDNESS: (D) TOPOLOGY:	398 base pairs nucleic acid single linear			
(xi) SEQUENCE DESCRIPTION: SEQ) ID NO: 5:			
TGCGTGAAAT NACTGTATGG CNTGCNATCT CTTTGTAAACT TCATTATCAT TACTCCTATT TTTTGCAGTTT TCCTATTTCC CCTCTGCAAA TGTATACAAAAAC AGTAATATTA GATTTTNGAAAT TACAATTTCA AACAGTATTC GCCTANTTTT TTTAAATCAA CAAAAACAAAAAC AACAGTATTC GCCTANTTTT TTTAAATCAA CAAAAACAAAAACAAAAAAAAAA	TETCTCTCGT TAATTAATTT CATTTCCGTA 120 TETCAAAAAT AATAAATCTA ATCTAAATAA 180 ATAAACGCTT TAATTGCGTA TACTTTTATA 240 AAAAAAGTAA TATGANCGTT TGGGTTTGCN 300 ITTATAATTC ACCGTTTTTC ACTTTTTNCA 360			
(2) INFORMATION FOR SEQ ID NO: 6:				
(i) SEQUENCE CHARACTERISTICS:				
(A) LENGTH: (B) TYPE: (C) STRANDEDNESS: (D) TOPOLOGY:	410 base pairs nucleic acid single linear			
(xi) SEQUENCE DESCRIPTION: SEC	Q ID NO: 6:			
GTAATGACAA ATNTAACTAC AATCGCTTAA ATGCGTATAT CAACTTTAAT GAATATATTA ATAAAGAGT AAATCAACAAC AGATAACTAC AGAAACAAC AGAAAACAAC AGAAACAACAACAACAACAACAACAACAACAACAACAACA	AGGACTAAA CGAAGAGCGT GATATTTTAA 120 PTGAAAAACG TCCTGAAAAT AAAAAAGCAC 180 PTGATGCAAA TGAGCAAAAG ATTGAAGAAG 240 AATTACCTAT CTCTNCTGGT TTCTNCTTTA 300 PTGGTACATC AAATGCATTC CGTCATTTTN 360			

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3479 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

AAGCTTCATT AAAAACTTTC TTCAATTTAT CAACATATTC AATGACGTTA GCATGTGCGA CACCAACGGA YTKSAKKTCA TGATCTCCTA TAAATTCAGC AATTTCCTTT TTCAAGTATT 120 GGATACTAGA ATTTTGAGTT CTCGCATTGT GCACAAGCTC TAAGCGACCA TCATCTAGTG 180 TACCAATTGG TTTAATTTTC ATAAGATTAC CAATCAAACC TTTTGTTTTA CTAATTCTGC 240 CACCTTTAAT TAATTGATTC AATTGCCCTA TAACTACAAA TAATTTAATG TTTTCTCTTA AATGATTTAA CTTTTTAACT ATTTCAGAAG TTGAGACACC TTCTTTTACA AGCTCTACTA 300 360 GGTGTTGTAT TTGATACCCT AAACCAAAAG AAATAGATTT TGAATCAATA ACAGTTACAT 420 TAGCATCTAC CATTTGACTT GCTTGGTAAG CAGTGTTATA TGTACCACTT AATCCTGAAG 480 AAAGATGAAT ACTTATGATT TCAGAGCCAT CTTTTCCTAG TTCTTCATAA GCAGATATAA 540 ATTCACCTAT GGCTGGCTGA CTTGTCTTTA CATCTTCATC ATTTTCAATA TGATTAATAA 600 ATTCTTCTGA TGTAATATCT ACTTGGTCAA CGTATGAAGC TCCTTCAATA GTTAAACTTA 660 AAGGAATTAC ATGWATGTTG TTTGCTTCTA ARTATTCTTT AGATAAATCG GATGTTGAGT CTGTTACTAT AATCTGTTTT GTCATGGTCG TTTTCCCCCT TATTTTTTAC GAATTAAATG TAGAAAGGTA TGTGGAATTG TATTTTTCTC ATCTAGTTTA CCTTCAACTG AAGAGGCAAC 720 780 TTCCCAGTCT TCAAATGTAT AAGGTGGAAA GAACGTATCA CCACGGAATT TACCTTCAAT 900 AACAGTAATA TACATGTCGT CCACTTTATC AATCATTTCT TCAAATAATG TTTGCCCTCC AAATATGAAA ACATGGCCCG GTAGTTGGTA AATATCTTCA ATAGARTGAA TTACATCAAC 960 1020 GCCCTCTACG TTGAAACTTG TATCTGAAGT AAGTACAACA TTTCGACGAT TCGGTAGTGG 1080 TTTACCAATC GATTCAAATG TCTTACGACC CATTACTAAA GTATGACCTG TTGATAATTT 1140 TTTAACATGC TTCAAATCAT TTGGTAGGTG CCAAGGTAAT TGATTTTCAA AACCAATTAC 1200 TCGTTGCAAG TCATGTGCAA CTAGAATGGA TAAAGTCATA ATTATCCTCC TTCTTCTATC ATTTCATTTT TTATTACTAA GTTATCTTTA ATTTAACACA ATTTTTATCA TAAAGTGTGA 1260 1320 TAGAAATAAT GATTTTGCAT AATTTATGAA AACGTTTAAC ACAAAAAAGT ACTTTTTTGC ACTTGAAAAT ACTATGATGT CATTTKGATG TCTATATGGT TAGCTAAYTA TGCAATGACT ACAMTGCTAT KGGAGCTTTT ATKGCTGGAT GTGATTCATA GTCAACAATT TCCAMAATCT 1380 1440 1500 TCATAATTTA TGTCGAAAAT AGACTTGTCA CTGTTAATTT TTAATGTTGG AGGATTGAAG 1560 CTTTCACGTG CTAATGGTGT TKCGMATCGC ATCAATATGA TTTGAATAAA TATGTGCATC TCCAAATGTA TGCACAAATT CACCCACTTC AAGTCCACAT TTCTTTGGCA ATAAGGTGTG 1620 1680 TCAATAAAGC GTAGCYTGCG ATATTAAATG GCACACCTAA AAAGATATCT GCGCTACGTT 1740 GGTATAACTG GCAACTTAAC TTACCATCTT GGACATAAAA CTGGAACATG GTATGACAAG GCGGAAGTGC CATTGTATCA ATTTCTGTTG GATTCCATGC AGATACGATG TGTCGCCTTG 1800 1860 AATCTGGATT ATGCTTAATT TGTTCAATTA CTGTTTTAAG TTGATCAAAA TGATTACCAT 1920 CTTTATCAAC CCAATCTCGC CMATTGTTTA CCATAAACAT TTCCTAAATC CCCGAATTGC 1980 TTCGCAAATG TATCATCTTC AAGAATACGT TGCTTAAATT GTTTCATTTG TTCTTTATAT TGTTCGTTAA ATTCAGGATC ACTCAATGCA CGATGCCCGA AATCTGTCAT ATCTGGACCT 2040 2100 TTATACTCGT CTGATTTGAT ATAATTTTCA AAAGCCCATT CGTTCCATAT ATTATTATTA 2160 TATTTTAATA AGTATTGGAT GTTTGTATCT CCTTTAATGA ACCATAATAA TTCGGTTGCT 2220 ACTAATTAA AAGAAACTTT CTTTGTCGTT AATAGTGGAA ATCCTTTAGA TAAGTCAAAG CGAAGTTGAT GACCAAATTT CGAAATCGTA CCTGTATTTG TGCGATCATT TCGTGTATTT CCTATTTCTA AAACTTCTTC ACAAAGACTG TGATATGCTG CATCAAATGA ATTTCAACAT 2280 2340 2400 ATGCGATAAC ACCTCATTTT CATTATTTAT AGTATGTATA TTTAGTTTGA TATAACTTAA 2460 CTTTATGTAG CATTTTGTTA TCACTCATTT TAGGAATATG ATATTAATAT CATGAATTCC GTTACTTTAT TTATAAAATG CTGATTAAGT ACCTACCCCA TCGTAACGTG ATATATGTTT CCAATTGGTA ATTGTTTACC CAAATCTATA ACTTTAATGC TAAAAAATTT TAAAAAAGAG 2520 2580 2640 GTTAACACAT GATTTGAATA TTATGTTTGA TGTCCTATTA AAACAGTTAA ATTTCTAGAA 2700 AATATAGTTG GTAAAAACGG ACTTTATTTA ACAAATAGAA TACAACTATA TTCTCTATTT TCAATGACAG ACACCATTTT TAATATTATA AAATGTGTTA ACCTTTATAT TTATTTATGT 2760 2820 GTACTATTTA CAATTTTCGT CAAAGGCATC CTTTAAGTCC ATTGCAATGT CATTAATATC 2880 TCTACCTTCG ATAAATTCTC TAGGCATAAA ATAAACTAAA TCTTGACCTT TGAATAAAGC ATACGAAGGA CTAGATGGTG CTTGCTGAAT GAATTCTCGC ATTGTAGCAG TTGCTTCTTT ATCTTGCCCA GCAAAAACTG TAACTGTATT TGTAGGTCTA TGTTCATTTT GTGTTGCAAC 2940 3000 3060 TGCTACTGCA GCTGGTCTTG CTAATCCAGC TGCACAGCCG CATGTAGAGT TAATAACTAC 3120 AAAAGTAGTG TCATCAGCAT TTACTTGGTT CATATACTCC GATACTGCTT CGCTCGTTTC
TAAACTTGTA AAACCATTTT GAGTTAATTC GCCACGCATT TGTTGCGCAA TTTCTTTCAT
ATAAGCATCA TAYGCATTCA TATTTAATTC CTCCAATTAA ATTGTTCTGT TTGCCATTTG 3180 3240 3300 TYTCCATACT GAACCAAGYG CTTCAYCTCC GTTTTCAATA TCGAGATATG GCCATTTCAA 3360 TTTGTAATTT AACWTCAAAC GCMTKGTCAK KAATATGGGS WTTTAGKGCG GGAAGMTGMT 3420 YWGCATWACS WTCATSAWAG ATAWACAYAG CARCAYSCCA CYTWAYGAKT TTMWKTGGA 3479

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2875 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

GTGGTTCCCT GTCATTYTRA TATCCATCAA ACCTTTATTA ATACACGTRG CTATCGAAGC ATTTTGTAAT TGTATTAATG AAATATGCTT GAGTYCTCTT TGTAACCGTT CAATCATAGG 120 AATTGTTTGA TCAGTAGAAC CACCATCAAT ACAAAGGATT CTATAGTGTT CTTTACTCTC 180 AATAGATATT AACAATTGTC GAATTGTTGC CTCATTATTA CATGTAGGTA TGATTATCGT AAACCTCATT TTGTCACCAT CTTATCTATA TATTCTGTGA GCTGATGTAA ACTTTTATCA GTATTATACT TATGCCAATC TTTAAATAAC GGACTTAATA GATGTTCTTT TTCTTGTATC 240 300 360 GTCATTATTA AATCTTCTTC AGTATACACT TTGTAGCTAT CCGGTATTGC TTTGTAAAAT 420 TGATTCAGGC CTCTCACCTG ATCATATGTT CCTTCATCAT ACACATAAAA TATAGTTGGA ATATCTAACA AGCTAGCTTC TATTGGCAGC GAACTATAGT CGCTAATAAT TATATCTGAC 480 540 ATTAGCATTA ATGTAGACGT GTCGATTGAA GATACGTCAT CAATGTCTGA ATCTTCAATT 600 GATGGATGTA ATTTATTAAT CAGTGTATAT CCTGGTAAAC ATTTTTCAAA ATAAGCTTTA
TCAATAGCCC TATTATCTGC TTTATCTTCT CTATATGTTG GTACATATAA TACCAACTTA
TTTGTAATTC CATATTTATC CTTTAACTCT GCCTTAACCG TTGCTCTATC AGCTGTGTAA 660 720 780 TATTTATTAA TTCTCGGAAG CCCAAAATAC AGCATTTGCT CTTCTGTTGC ACCTAAAGAC 840 TGTTTAAAAC ATTGTGACAT TTGTTCACAA CCCACTAAGT TAAAAATCCG TCGCTTGATA AACTTTACGG TACTGCTGAA CCATTGCCTT GTCAGACACA TCGACTTGAT GATCTGTTAA 900 960 GCCAAAGTTT TTTAATGCAC CACTTGCATG CCACGTTTGA ACAATGTGTT TGATTAGAAK 1020 TCTTATTATA TCCACCTAGC MATAGGTAAT AATTATCGAT AATAATCATC TGCGCGCTTT 1080 TCAAAGCCTT AATTTGTTTT ACCAATGTTC GATTAGTCAT TTCTATCACA TCAACATCGT CGCTAAGTTC AGATAAATAA GGCGCTTGTT TTGGTGTTGT TAAAACAGTT TTCTGATACG 1140 1200 ACGAATTATT TAATGCTTTG ATGATAGGCT TAATATCTTC TGGAAAAGTC ATCATAAATA 1260 CGATATGCGG TTTATCAATC ACTTGAGGSG TAWTCATTW AGRAAGTATT CGAACTACCA AATGATAAAA TTTCTTTATT AAAAACGTTC ATAATAACAC CAACTTAATA TGTTATTTAA CTTAAATTAT AAACAAAAAT GAACCCCACT TCCATTTATT AATGGTTAGC GGGGTTTCGT 1320 1380 1440 CATATAAATA TATTACAAGA AGTCTGCAAA TTGATCTCTA TATTTCATGT GTWAGTACGC 1500 MCCMATTGCA AAGAAAATGG CAACAATACC GAAATTGTAT AACATTAATT TCCAATGATC CATGAAATAC CATTCGTGAT ATAAAATTGC TGCACKKTWT KATTMAKCWR TAMRGTMAAC TRGMTKATAT TTCATCATTK SATGAATTAA ACCACTGATA CCATGGTTCT TTGGTAGCCA 1560 1620 1680 CAAAATTGGT GAAAAGTAAA ATAATATTCT TAATATTGGC TTGCATTAAC ATTTGTGTAT 1740 CTCTAACTAA CAACACCGAG TGTTGATGTT AATAACGTCA CCGAGGCAGT TAAGAAAAAA CAAAACGGTA CATATATCAA TAATTGAATG ATATGTATTG ATGGATAAAT ACCAGTAAAC 1800 1860 ATACATGCAA TTATCACAAG TAAAAGTAAG CCTAAATGTC CATAAAATCT ACTTGTCACA 1920 ATATATGTCG GTATTATCGA TAACGGGAAG TTCATTTTCG ATACTTGATT AAACTTTTGT GTAATTGCTT TAGTACCTTC TAAAATACCT TGGTTGATGA AGAACCACAT ACTGATACCA ACCAATAACC AATAAACAAA AGGTACACCA TGAATTGGTG CATTACTTCT TATTCCTAAT 1980 2040 2100 2160 CCAAAAACCA TCCAGTAAAC CATAATTTGC ATAACAGGGT TAATTAATTC CCAAGCCACA CCTAAATAGT TACTATGATT GATAATTTTA ACTTGAAACT GAGCCAGTCT TTGAATTAAA
TAAAAGTTCT WTASATGTTC TTTAAAAACT GTTCCTATTG CTGACATTCC ATTAAACCAC
ACTTTCAAAT GTTTAACTAT TTCTCTAACT TAACTAAATA GTATTATAAT AATTGTTGTA 2220 2280 2340 AATACTATCA CTAWACATGG ATGCTATCAA AATTATTGTC TAGTTCTTTA AAATATTAGT 2400 TTATTACAAA TACATTATAG TATACAATCA TGTAAGTTGA AATAAGTTTA GTTTTTAAAT ATCATTGTTA TCATTGATGA TTAACATTTT GTGTCAAAAC ACCCACTCTG ATAATAACAA 2460 2520 AATCTTCTAT ACACTTTACA ACAGGTTTTA AAATTTAACA ACTGTTGAGT AGTATATTAT 2580 AATCTAGATA AATGTGAATA AGGAAGGTCT ACAAATGAAC GTTTCGGTAA ACATTAAAAA 2640 TGTAACAAAA GAATATCGTA TTTATCGTAC AAATAAAGAA CGTATGAAAG ATGCGCTCAT TCCCAAACAT AAAAACAAAA CATTTTTCGC TTTAGATGAC ATTAGTTTAA AAGCATATGA 2700 2760 AGGTGACGTC ATAGGGCTTG TTGGCATCAA TGGTTCCGGC AAATCAACGT TGAGCAATAT 2820 CATTGGCGGT TCTTTGTCGC CTACTGTTGG CAAAGTGGAT CGACCTGCAG TCATA 2875

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 453 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

CTTAAAATAT TACAAAGACC	GTGTGTNAGT	ACCTTNAGCG	TATATCAACT	TTAATGAATA	60
TATTAAAGAA CTAAACGAAG					120
GGATATTGAA AAACGTCCTG					180
ACAACTTGAT GCAAATGAGC					240
TAATGNTTTA CCTATCTCTC	CTGGTTTCTC	CTTTATCAAT	CCNTTTGANG	TTGTTTATTA	300
TGCTGGTGGT ACATCAAATG					360
AATGNTTAAT TTTGCATTAA	ATCATGGCAT	TGNCCGTTAT	AATTNCTATG	GTGTTAGTGG	420
TNAATTTNCA GNAGGTGCTG	AAGATGCTGG	TGT			453

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	445 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single -
(D)	TOPOLOGY:	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

ATGCTCAGGT CGATCATACA	TCTATCATCA	TTTTAATTTC	TAAAATACAA	ACTGAATACT	. 60
TTCCTAGAAT NTNANACAGO	AATCATTGCT	CATGCATTTA	ATAAATTACA	ATTAGACAAA	120
TATGACATTT GATATCACAC	ACTTGCAAAC	ACACACATAT	ATAATCAGAC	ATAAATTGTT	180
ATGCTAAGGT TTATTCACCA	AAANTATAAT	ACATATTGGC	TTGTTTTGAG	TCATATTGNN	240
TGANTTANAA NGTATACTCA	ACTCANTCAT	TTNCAAATNG	GTTGTGCAAT	TCNTATTTNT	300
NTTTCTTGCA ATCCCTTGTT	AAACTTGTCA	TTTNATATAT	CATTNTTCGG	GGCTTTATTA	360
AAANNCATNT NNNACNGNGC	CTATNGNNTC	NNTNACTATN	NGCCCTAACA	TCATTTTCNT	420
CTNTTTCTTA TTTTTTACGG				•	445

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	719 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D).	TOPOLOGY:	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

GATCRAGGAG	ATCAAGAAGT	GTTTGTTGCC	GAATTACAAG	AAATGCAAGA	AACACAAGTT	60
GATAATGACG	CTTACGATGA	TAACGAGATA	GAAATTATTC	GTTCAAAAGA	ATTCAGCTTA	120
AAACCAATGG	ATTCAGAAGA	AGCGGTATTA	CAAATGAATC	TATTAGGTCA	TGACTTCTTT	180
GTATTCACAG	ACAGAGAAAC	TGATGGAACA	AGTATCGTTT	ACCGCCGTAA	AGACGGTAAA	240
TATGGCTTGA	TTCAAACTAG	TGAACAATAA	ATTAAGTTTA	AAGCACTTGT	GTTTTTGCAC	300
AAGTGCTTTT	TTATACTCCA	AAAGCAAATT	ATGACTATTT	CATAGTTCGA	TAATGTAATT	360
TGTTGAATGA	AACATAGTGA	CTATGCTAAT	GTTAATGGAT	GTATATATTT	GAATGTTAAG	420
TTAATAATAG	TATGTCAGTC	TATTGTATAG	TCCGAGTTCG	AAAATCGTAA	AATATTTATA	480
ATATAATTTA	TTAGGAAGTT	ATAATTGCGT	ATTGAGAATA	TATTTATTAG	TGATAAACTT	540
GTTTGACACA	GAATGTTGAA	TGAATTATGT	CATAAATATA	TTTATATTGA	TCTACCAATG	600
AGTAAATAAN	TATAATTTCC	TAACTATAAA	TGATAAGANA	TATGTTGTNG	GCCCAACAGT	660
TTTTTGCTAA	AGGANCGAAC	GAATGGGATT	TTATCCAAAA	TCCTGATGGC	ATAATAAGA	719

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	949 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

		•				
CTTTACCATC	TTCAGCTGAA	ACGTGCTTCG	CTTCACCAAA	CTCTGTTGTT	TTTTCACGTT	60
CAATATTATC	TTCAACTTGT	ACTACAGATT	TTAAAATGAA	TTTACAAGTA	TCTTCTTCAA	120
TATTTTGCAT	CATGATATCA	AATAATTCAT	GACCTTCATT	TTGATAGTCA	CGTAATGGAT	180
TTTGTTGTGC	ATAAGAACGT	AAGTGAATAC	CTTGACGTAA	TTGATCCATT	GTGTCGATAT	240
GATCAGTCCA	ATGGCTATCA	ATAGAACGAA	GTAAAATCAT	ACGCTCAAAC	TCATTCATTT	300
GTTCTTCTAA	GATATCTTTT	TGACTTTGAT	ATGCTGCTTC	AATCTTAGCC	CAAACGACTT	360
CGAAAATATC	TTCAGCATCT	TTACCTTTGA	TATCATCCTC	TGTAATGTCA	CCTTCTTGTA	420
	ATTAATGTAG	TCGATGAATG	GTTGATATTC	AGGCTCGTCA	TCTGCTGTAT	480
TAATATAGTA	ATTGATACTA	CGTTGTAACG	TTGAACGTAG	CATTGCATCT	ACAACTTGAG	540
	TTCATCAATA		TTTCGTTATA	GATAATTTCA	CGTTGTTTAC	600
	ATCGTATTCT		TACGCGCGTC	GAAGTTATTA	CCTTCTACAC	660
•		GCTCTTGATA		TTCAATTGGT		720
	TCGGCTCATC			ACCAAAACGA		780
				CACCTTGACG	TCCAGAACGA	840
TCATCTIGIA	ATGATAAATA					
CCACGTAACT	GGTCATCAAT	ACGACGAAGA	TTCATGTCGC	TCTGTACCTA	TTACTGCTAA	900
ACCGCCTAAT	TCCTCTACGC	CTTCACCTAA	TTTGATATCT	GTACCACGA		949

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	594 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

GGGGATCAAT TTANAGGACG	TACAATGCCA	GGCCGTCGTT	NCTCGGAAGG	TTTACACCAA	60
GCTATTGAAG CGAGGAAAGG	CGTTCAAATT	CAAAATGAAA	TCTAAAACTA	TGGCGTCTAT	120
TACATTCCAA AACTATTTCA	GAATGTACAA	TAAACTTGCG	GGTATGACAG	GTACAGCTAA	180
AACTGAAGAA GAAGAATTTA	GAAATATTTA	TAACATGACA	GTAACTCAAA	TTCCGACAAA	240
TAAACCTGTG CAACGTAACG	ATAAGTCTGA	TTTAATTTAC	ATTAGCCAAA	AAGGTAAATT	300
TGATGCAGTA GTAGAAGATG	TTGTTGAAAA	ACACAAGGCA	GGGCAACCMG	TGCTATTAGG	360
TACTGTTGCA GTTGAGACTT	CTGTATATAT	TTCAAATTTA	CTTAAAAAAC	GTGGTATCCG	420
TCATGATGTG TTAAATGCGA	PANATCATGA	MCGTGAAGCT	GAAATTGTTG	CAGGCGCTGG	480
RCAAAAAGGT GCCGTTACTA	TTGCCACTAM	CATGGCTGGT	CGTGGTACAG	ATATCAAATT	540
AGGTGAAGGC GTTANAANGA	AATTAGGCGG	TTTANCCAGT	AATANGTTCA	GAAG	594
AGGIGAAGGC GITANAANGA	WYLINGGCGG	IIIMICCHOI			

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	2192 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

GCATGMCTGC	AGGTCGATCY	SYTGAACAGT	CATCAACTAC	AACCACTTCA	AATTCAGTTT	60
TCGGAAAATC	TTGTTTCGCA		GTAATTCTGT		TCTGAATTGT	120
ATGTTGGAAC	TATTACTGAA	AATTTCATCA	TTATACCTCT	CCCACTTTGA	CTACTATATA	180
AACTTAGCTA	CCAAATAAAT	TTCTGACTAA	ACGCTCACTT	GATCGGCCAT	CTTGATATTT	240
AAAATGTTTA	TCTAAGAATG	GAATGACTTT	TTCTCCTTCA	TAATCTTCAT	TGTCCAAGGC	300
GTCCATTAAT	GCGTCAAATG	ATTGCACAAT	TTTACCTGGA	ACAAATGATT	CATATGGTTC	360
ATAAAAATCA	CGCGTCGTAA	TATAATCTTC	TAAATCAAAT	GCATAGAAAA	TCATTGGCTT	420
TTTAAATACT	GCATATTCAT	ATATTAAAGA	TGAATAGTCA	CTAATTAATA	AATCTGTTAT	480
GAACAGTATA	TCATTAACTT	CTCTAAAGTC	AGAAACGTCA	ACAAAATATT	GTTTATGTTT	540
GTCTGCAATA	TTAAGTCTAT	TTTTCACAAA	TGGATGCATT	TTAAATAATA	CAACCGCGTT	600
ATTTTTTTCG	CAATATCTTG	CTAAACGTTC	AAAATCAATT	TTGAAAAATG	GGTAATGTGC	660
TGTACCATGA	CCACTACCTC	TAAATGTTGG	TGCGAAAAGA	ATGACTTTCT	TACCTTTAAT	720
AATTGGTAAT	TCATCTTCCA	TCTCTTGTTT	GATCTGTGTC	GCATAAGCTT	CATCAAATAG	780
TACATCAGTA	CGTTGGGAAC	ACCTGTAGGC	ACTACATTTT	TCTCTTTAAT	ACCAAATGCT	840
TCAGCGTAGA	ATGGAATATC	GGTTTCAAGA	TGATACATAA		AAGCTACGGA	900
TGATTTAATG	AATCAATAAA	TGGTCCACCC	TTTTTACCAG	TACGACTAAA	GCCAACTGTT	960

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TTAAAGGCAC CAACGGCATG CCATACTTGA ATAACTTCTT GAGAACGTCT AAAACGCACT GTATAAATCA ATGGGTGAAA GTCATCAACA AAGATGTAGT CTGCCTTCCC AAGTAAATAT GGCAATCTAA ACTTGTCGAT GATGCCACGT CTATCTGTAA TATTCGCTTT AAAAACAGTG TGAATATCAT ACTITITATC TAAATTTTGA CGTAACATTT CGTTATAGAT GTATTCAAAG
TTTCCAGACA TCGTTGGTCT AGAGTCTGAT GTGAACAACA CCGTATTCCC TTTTTTCAAG
TGGAAAAATT TCGTCGTATT AAATATCGCT TTAAAAATAA ATTGTCTTGT ATTAAATGAT
TGTTTGCGGA AATACTTACG TAATTCTTTA TATTTACGRA CGATATAAAT ACTTTTAAMT 1260 1320 TCCCGGAGTC GTTACAACAA CATCAAGGAC AAATTCATTA ACATCGCTAG AAATTTCAGG TGTAACAGTA TAAACCGTTT TCTTTCGAAA TGCCGCCTTT TCTAAATTCT TTTAGGTAAG TCTGCAATAA GAAATTGATT TTACCATTTT GTGTTTCTAA TTCGYTGTAT TCTTCTTCTT 1500 1560 GTTCTGGCTT TAGATTTTGA TATGCATCAT TAATCAACAT CTGGGTTTAA CTGTGCAATA 1620 TAATCAAGTT CTTGCTCATT CACTAATAAG TACTTATCTT CAGGTAAGTA ATAACCATTA 1680 TCTAAGATAG CTACATTGAA ACGACAAACG AATTGATTCC CATCTATTTT GACATCATTC GCCTTCATTG TACGTGTCTC AGTTAAATTT CTTAATACAA AATTACTATC TTCTAAATCT 1740 1800 AGGTTTTCAC TATGTCCTTC AACGAATAAC TGAACACGTT CCCAATAGAT TTTAYCTATA
TATATCTTAC TTTTAACCAA CGTTAATTCA TCCTTTTCTA TTTACATAAT CCATTTTAAT 1860 1920 ACTGTTTTAC CCCAAGATGT AGACAGGTCT GCTTCAAAAG CTTCTGTAAG ATCATTAATT GTTGCAATTT CAAATTCTTG ACCTTTTAAA CAACGGCTAA TTTATCTAAC AATATCTGGG 1980 2040 TATTGAATGT ATAAGTCTAA CAACATCTTG GAAATCTTTT GAACCACTTC GACTACTACC 2100 AATCAACGTT AGTCCTTTTT CCAATACTAG AACGTGTATT AACTTCTACT GGGAACTCAC 2160 TTACACCTAA CAGTGCAATG CTTCCTTCTG GT 2192

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2431 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

ATGCAGGTCG ATCNCCTNGT TTATTCNGNT TCATCATTTT CCGATAAATA CTGTAAATAT GNNTAGGTCT ACCATTTATA TCGCCTTCGA TATTCATTCG GTCCATTTCA GTACGTATTC 120 TATCAATAGC CGTTTCGATA TACGCTTCAC GTTCACTACG TTTCTTCTTC ATTAAATTGA 180 CTATTCTAAA ATATTGCACA TTATCAATAT AACGAAGAGC CGKATCTTCT AGTTCCCATT 240 TGATTGTATT AATACCAAGA CGATGTGCTA ATGGTGCATA AATTTCTAAT GTTTCTCGAG AAATTCTAAT TTGKTTTTCG CGCGGSATGG STTTCAAGGT ACGCATATTA TGTAATCTGT 300 360 CTGCTAATTT CAMCAAAATT ACGCGTACAT CTTTGGCAAT CGCAATAAAT AACTTGSGAT 420 GATTTTCAGC TTGTTGTTCT TCTTTTGAGC GGTATTTTAC TTTTTTAAGC TTCGTCACAC CATCAACAAT TCGAGCAACT TCTTCATTGA ACATTTCTTT TACATCTTCA AATGTATACG GTGTATCTTC AATTACATCA TGCAAAAAAC CTGCGACAAT CGTCGGTCCG TCTAATCGCA 540 TTTCTGTTAA AATACCTGCA ACTTGTATAG GATGCATAAT GTATGGTAAT CCGTTTTTTC GGAACTGACC TTTATGTGCT TCATAAGCAA TATGATAGCT TTTTAAAACA TACTCATATT 720 CATCTGCTGA CAAATATGAT TTTGCTTTGT GAAGAACTTC GTCTGCACTA TATGGATATT 780 CGTTGTTCAT TATATGATAC ACCCCATTCA TATTTATTAC TTCGCCTTTA AACAATGGAT 840 TTAGGTACTC TTGTTGAATA GTATTTGTCC CACACCAATC ATACGTCCGT CGACGATAAA
TATTTATCCT GTCGTGCATT AATCGTAATA TTAATTTTAC TTGAGCGAGT TTAATTTGTA
TACTATTCCT ACTTTTAAAA CTTTTACAAA AATTCGACCT AAATCTACTG TTTCATTTTT 900 960 TAAATATTAG TTCTATGATA CTACAATTTA TGARATAAAT AAACGAWGTT ATTAAGGTAT 1080 AATGCTCMAT CATCTATCAT TTTCAGTAAA TAAAAAATCC AACATCTCAT GTTAAGAAAA CTTAAACAAC TTTTTTAATT AAATCATTGG TYCTTGWACA TTTGATRGAA GGATTTCATT TGATAAAAATT ATATTATTA TTATTCGTCG TATGAGATTA AACTMATGGA CATYGTAATY 1140 1200 TTTAAWAKTT TTCMAATACC AWTTAAAWKA TTTCAATTCA AATTATAAAW GCCAATACCT 1320 AAYTACGATA CCCGCCTTAA TTTTTCAACT AATTKTATKG CTGYTCAATC GTACCACCAG TAGCTAATAA ATCATCTGTA ATTRRSACAG TTGACCTGGK TTAATTGCAT CTTKGTGCAT 1380 1440 TGTYAAAACA TTTGTACCAT ATTCTAGGTC ATAACTCATA ACGAATGACT TCACGAGGTA 1500 ATTTCCCTTC TTTTCTAACA GGTGCAAAGC CAATCCCAT KGAATAACT ACAGGACAGC CAATGACTAAA GCCAACGGC TTCAGGTCCW ACAACGATAT CAAACATCTC TGTCTTTTGC GTATTCWACA ATTTTATCTG TTGCATAGGC ATATGCTTCA CCATTATCCA TAATTGTAGT AAATCCATT AAATCTTCA AAATTTCCT CCTAAATTGC TCACGACAAT TGTGACTTTA TCCAATTTTT TAATTCTCAA AAATTTCCT CCTAAATTGC CCTAAATTGC TCACGACAAT TGTGACTTTA TCCAATTTTT 156Ô 1620 1680 1740 1800 TATTTCTGAA AAATCTTGAT ATAATAATTG CTTTTCAACA TCCATACGTT GTTGTCTTAA
TTGATATACT TTGCTGGAAT CAATCGATCT TTTATCAGGT TGTTGATTGA TTCGAATTAA
ACCATCTTCT TGTGTTACAA ATTTTAAGTC TAAGAAAACT TTCAACATGA ATTTAAGTGT 1860 1920 1980 ATCTGGTTTC ACACTTAAAT GTTGACACAA TAACATACCC TCTTTCTGGA TATTTGTTTC 2040 TTGTTTAGTT ATTAATGCTT TATAACACTT TTTAAAAATA TCCATATTAG GTATACCATC GAAGTAAATC GAATGATTAT GTTGCAAAAC TATAKAAAGW TGAGAAAATT GCAGTTGTTG 2100

CAAGGAATTA	GACAAGTCTT	CCATTGACGT	TGGTAAATCT	CTTAATACTA	CTTTATCAGT	2220
TTGTTGTTTA	ATTTCTTCAC	CATAATAATA	TTCATTCGCA	TTTACTTTAT	CACTTTTAGG	2280
ATGAATAAGC	ACGACAATAT	TTTCATCATT	TTCTGTAAAA	GGTAAACTTT	TTCGCTTACT	2340
					TTTGCGGTGA	2400
	TTCCATTCGT					2431

(2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2018 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

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GCATCAGTTG	GTACTTTAAA	TAAATGTGCA	GTACCAGTCT	TAGCAACATT	TACAGTTGCT	60
AATTCAGTAT	TTTTCTTAGC	ATCTTTAATA	ACTAAATTTG	TTGCACCTTG	CTTACTATTC	120
GTTTGCATAG	TAGTAAAGTT	TAATTAAT	TCTGAATCTG	GTTTTACATT	TACAGTTTTT	180
GAAATACCGT	TAAAGTTACC	ATGATCTGTA	GAATCATTTG	CATTCACACG	ACCTAATGCA	240
GCCACGTTTC	CTTTAGCTTG	ATAGTTTTGA	GGGTTATTCT	TATCAAACAT	ATCGCTTCGT	300
CTTAATTCTG	AGTTAACGAA	ACCAATCTTA	CCGTTGTTAA	TTAATGAATA	ACCATTTACT	360
TTATCTGTAA	CAGTTACAGT	TGGATCCTGT	CTATTCTCAT	CTGTTGATAT	GGCAGGATCA	420
TCAAATGTTA	ATGTCGTATT	AATACTGCCT	TCACCAGTAT	TGCTAGCATT	TGGATCTTGA	480
GTTTGTGCGT	TTGCTGCTAC	AGGTGCTGCT	GGTTGCGCTG	CTGCTGGANC	ATTCGCTGGC	540
TGTGTTTGAT	TTGCCGGTGT	TGCATTATTA	TWAGGTGTTG	CTTGGTTATT	TCCTTGACCT	600
GCTTGGTWTG	CCGGTGTTGC	TTGATTTCCA	GGTTGTGCAT	GTGCAACGTT	ATTCGGATCA	660
GCTTGATCAC	CTTGTCCAGC	TGGTTGTGTA	TTTGGTTGTG	CTGCTCCTCC	TGCTGGATTA	720
GCCTGTCCAC	CTTGGTTTGC	TGGTTGTACT	GCTGGTTGTC	CTTGGTTGGC	AGGTGCAGCT	780
GGCTGTGCTG	TAGGATTAGC	TTGAGCACCA	GCATTTGCGT	TAGGCTGTGT	ATTGGCATCA	840
GCTGGTTGTG	CTGGTTGATT	TTGTGCAGGC	TGATTTTGCT	CTGCTGCAKA	CGCTGTTGTC	900
GGGTTAGTAG	ATATAAAAGT	AACAGTGGCA		AAAAAATACC	GACATTAAAT	960
TTTCTGATAC	TAAATTTTTG	TTGTCTGAAT	AAATTCATTA		CTGGTTGATT	1020
ATTCTCGCTG	TTAAATGATT	TCACTTAATC	AACTGTTAAG	ATAAGTAGTA	GCATCTGCGT	1080
TAAAAACACA	AAGCAACTCT	ATCTAATTAA		ATCATCATTA	TATATTGAGT	1140
ACCAGTGTAT	TTTATATTAC	ATATTGATTA	CTTTGTTTTT	ATTTTGTTTA	TATCATTTTA	1200
CGTTTGTACT	ATAAATTATT	TCTACAAACA		ATGCATACGC	ATCGGCTCAT	1260
TTGTAATACA	GTATTTATTT	ATCTAATCCC		GAACCACATC	AGCTATTTGT	1320
TGTGCAAATC	TTTCAGCATC	TTCATCAGTT	GCTGCTTCAA		AACTAATGGT	1380
TCTGTTCCAG	AAGGTCTTAC	TAAAATTCGA		TCATTTCTAC	TTCTACTTTA	1440
GTCATAACTT	CTTTAACGTC	AACATTTTCT		ATTTATCTGT	TACGCGTACG	1500
TTAATTAATG	ATTGTGGATA	TTTTTTCATT		ATTCACTTAG	TGATTTACCA	1560
GTCATTTTTA	TTACAGAAGC	TAATTGAATA		AACCATCACC	AGTTGTATTG	1620
TAATCCAYCA	TAACGATAŢG	TCCARATKGT		AGTTATAATT	ACCGCGAMGC	1680
ATTTCTTCTA	CTACATATCT	GTCGCCAACT	TTAGTTTTAT	TAGATTTAAT	TCCTTCTTGT	1740
TCAAGCGCTT	TGTAAAAACC	TAAATTACTC		AAAACGAATC	ATGTCATTAT	1800
TCAATTCTTG	ATTTTTATGC	ATTTCTTGAC		CATAATTTGG	TCACCGTCAA	1860
CGATTTGACC	ATTCTCATCT	ACTGCTATGA		ATCGCCGTCA		1920
CAAAATCACT		ACTACTTTTT	CAGCTAATTT	TCAGGATGTG	TAAAGCCACA	1980
TTTCTCATTG	ATATTATATC	CATCAGGGAC	TACATCCA	·		2018

(2) INFORMATION FOR SEQ ID NO: 17:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2573 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

ATTCGAGCTC	GGTACCCGKG	GATCCTSYAG	AGTCGATCCG	CTTGAAACGC	CAGGCACTGG	60
TACTAGAGTT	TTGGGTGGTC	TTAGTTATAG	AGAAAGCCAT	TTTGCATTGG	AATTACTGCA	120
		CAATGGATTT				.180
TOTAL	CCTCAACAAG	CCCTTTCATT	ACTTCCAACA	TTTTTTGGTG	AAACTTTATT	240
AMARAMANAM	OCTONACAAG	COGILICALI	TO TOO TICE.	TTTCCACTAC	TTTTTTTAAT	300
ATAAATAAAT	GATITGIAGI	GIAIAAAGIA	IMITITIECTI	TITOCACIAC	111111111	300

TCACTAAAAT GATTAAGAGT AGTTATAATC TTTAAAATAA TTTTTTTCTA TTTAAATATA TGTTCGTATG ACAGTGATGT AAATGATTGG TATAATGGGT ATTATGGAAA AATATTACCC GGAGGAGATG TTATGGATTT TTCCAACTTT TTTCAAAACC TCAGTACGTT AAAAATTGTA 480 ACGAGTATCC TTGATTTACT GATAGTTTGG TATGTACTTT ATCTTCTCAT CACGGTCTTT 540 AAGGGAACTA AAGCGATACA ATTACTTAAA GGGATATTAG TAATTGTTAT TGGTCAGCAG 600 ATAATTWTGA TATTGAACTT GACTGCMACA TCTAAATTAT YCRAWWYCGT TATTCMATGG GGGGTATTAG CTTTAANAGT AATATTCCAA CCAGAAATTA GACGTGCGTT AGAACAACTT 720 GGTANAGGTA GCTTTTTAAA ACGCNATACT TCTAATACGT ATAGTAAAGA TGAAGAGAAA TTGATTCAAT CGGTTTCAAA GGCTGTGCAA TATATGGCTA AAAGACGTAT AGGTGCATTA ATTGTCTTTG AAAAAGAAAC AGGTCTTCAA GATTATATTG AAACAGGTAT TGCCAATGGA TTCAAATATT TCGCAAGAAC TTTTAATTAA TGTCTTTATA CCTAACACAC CTTTACATGA 960 TGGTGCAAKG ATTATTCAAG GCACGAARAT TGCAGCAGCA GCAAGTTATT TGCCATTGTC TGRWAGTCCT AAGATATCTA AAAGTTGGGT ACAAGACATA GAGCTGCGGT TGGTATTTCA 1020 1080 GAAGTTATCT GATGCATTTA CCGTTATTGT ATCTGAAGAA ACTGGTGATA TTTCGGTAAC 1140 ATTTGATGGA AAATTACGAC GAGACATTTC AAACCGAAAT TTTTGAAGAA TTGCTTGCTG 1200 AACATTGGTT TGGCACACGC TTTCAAAAGA AAGKKKTGAA ATAATATGCT AGAAAKTAAA
TGGGGCTTGA GATTATTGC CTTTCTTTTT GGCATTGTTT TTCTTTTTAT CTGTTAACAA
TGTTTTTGGA AATATTCTTT AAACACTGGT AATTCTTGGT CAAAAGTCTA GTAAAACGGA 1260 1320 1380 TTCAAGATGT ACCCGTTGAA ATTCTTTATA ACAACTAAAG ATTTGCATTT AACAAAAGCG 1440 CCTGAAACAG TTAATGTGAC TATTTCAGGA CCACAATCAA AGATAATAAA AATTGAAAAT CCAGAAGATT TAAGAGTAGT GATTGATTTA TCAAATGCTA AAGCTGGAAA ATATCAAGAG GAAGTATCAA GTTAAAGGGT TAGCTGATGA CATTCATTAT TCTGTAAAAC CTAAATTAGC 1500 1560 1620 AAATATTACG CTTGAAAACA AAGTAACTAA AAAGATGACA GTTCAACCTG ATGTAAGTCA GAGTGATATT GATCCACTTT ATAAAATTAC AAAGCAAGAA GTTTCACCAC AAACAGTTAA AGTAACAGGT GGAGAAGAAC AATTGAATGA TATCGCTTAT TTAAAAGCCA CTTTTAAAAC 1740 1800 AGTAACAGGT GGAGAAGAC AATTGAATGA TATCGCTTAT ITAAAAGCCA CTITTAAAAC
TAATAAAAAG ATTAATGGTG ACACAAAAGA TGTCGCAGAA GTAACGGCTT TTGATAAAAA
ACTGAATAAA TTAAATGTAT CGATTCAACC TAATGAAGTG AATTTACAAG TTAAAGTAGA
GCCTTTTAGC AAAAAGGTTA AAGTAAATGT TAAACAGAAA GGTAGTTTTRS CAGATGATAA
AGAAATTAAAAAAA AGAAATTAAA TCTTCGGTAG TCGAGATGAC
TTMCAAAATA TAAACGGAGA GTAGATTTAG ATGGTATTTC AGAATCAACT 1860 1920 1980 2040 2100 GAAAAGACTG TAAAAATCAA TTTACCAGAA CATGTCACTA AAGCACAACC AAGTGAAACG AAGGCTTATA TAAATGTAAA ATAAATAGCT AAATTAAAGG AGAGTAAACA ATGGGAAAAT 2160 2220 ATTTTGGTAC AGACGGAGTA AGAGGTGTCG CAAACCAAGA ACTAACACCT GAATTGGCAT 2280 TTAAATTAGG AAGATACGAT GGCTATGTTC TAGCACATAA TAAAGGTGAA AAACACCCAC GTGTACTTGT AGGTCGCGAT ACTAGAGTTT CAGGTGAAAT GTTAGAATCA GCATTAATAG CTGGTTTGAT TTCAATTGGT GCAGAAGTGA TGCGATTAGG TATTATTTCA ACACCAGGTG 2340 2400 2460 TTGCATATTT AACACGCGAT ATGGGTGCAG AGTTAGGTGT AATGATTTCA GCCTCTCATA 2520 ATCCAGTTGC AGATAATGGT ATTAAATTCT TTGSCTCGAC CNCCNNGCTN GCA 2573

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1962 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

GTGCTTCCAC CAATACGTTC CACCATATGG AGGATTTCCA ATTAACGCCA CCGGTTCTTC TGTATCAATT GTTAATGTAT TGACATCTTT TACACTAAAT TTAATAATAT CAGACAACCC AACTTCTTCA GCGTTACGCT TAGCAATCTC TACCATTTCT GGATCGATAT CAGAAGCATA TACTTCGATT TCTTTATCAT AATCAGCCAT CTTATCCGCT TCATCACGGT AATCATCATA 120 240 AATATTTGCT GGCATGATGT TCCATTGCTC TGATACGAAC TCGCGATTAA AACCAGGTGC 300 GATATTTTGA GCAATTAAAC AAGCTTCTAT AGCTATTGTA CCCGAACCGC AAAATGGATC AATTAAAGGT GTATCACCTT TCCAGTTTGC AAGACGGATT AAACTTGCTG CCAACGTTTC 360 420 TTTAATTGGT GCTTCACCTT GTGCTAATCT ATAACCACGT CTGTTCAAAC CAGAACCTGA 480 TGTGTCGATA GTCAATAATA CATTATCTTT TAAAATGGCA ACTTCAACAG GGTATTTGGC 540 ACCTGATTCA TTTAACCAAC CTTTTTCGTT ATATGCGCGA CGTAATCGTT CAACAATAGC TTTCTTAGTT ATCGCCTGAC AATCTGGCAC ACTATGTAGT GTTGATTTAA CGCTTCTACC 600 660 TTGAACTGGG AAGTTACCCT CTTTATCAAT TATAGATTCC CAAGGGAGCG CTTTGGTTTG 720 TTCGAATAAT TCGTCAAACG TTGTTGCGTW AAAACGTCCA ACAACAATTT TGATTCGGTC TGCTGTGCGC AACCATAAAT TTGCCTTTAC AATTGCACTT GCGTCTCCTT CAAAAAATAT ACGACCATTT TCAACATTTG TTTCATAGCC TAATTCTTGA ATTTCCCTAG CAACAACAGC 780 840 900 TTCTAATCCC ATCGGACAAA CTGCAAGTAA TTGAAACATA TATGATTCTC CTTTTATACA 960 GGTATTTTAT TCTTAGCTTG TGTTTTTTAT ACATTTCCAA CAAATTTAAT CGCTGATACA 1020 TTAACGCATC CGCTTACTAT TTTAAAACAA GGCAGTGTCA TTATATCAAG ACAAGGCGTT AATTTTAAGT GTCTTCTTTY CATGAAAAAA GCTCTCCMTC ATCTAGGAGA GCTAAACTAG 1080

TAGTGATATT	TCTATAAGCC	ATGTTCTGTT	CCATCGTACT	CATCACGTGC	ACTAGTCACA.	1200
CTGGTACTCA	GGTGATAACC	ATCTGTCTAC	ACCACTTCAT	TTCGCGAAGT	GTGTYTCGTT	1260
TATACGTTGA	ATTCCGTTAA	ACAAGTGCTC	CTACCAAATT	TGGATTGCTC	AACTCGAGGG	1320
GTTTACCGCG	TTCCACCTTT	TATATTTCTA	TAAAAGCTAA	CGTCACTGTG	GCACTTTCAA	1380
ATTACTCTAT	CCATATCGAA	AGACTTAGGA	TATTTCATTG	CCGTCAAATT	AATGCCTTGA	1440
TTTATTGTTT	CAYCAAGCRC	GAACACTACA	ATCATCTCAG	ACTGTGTGAG	CATGGACTTT	1500
CCTCTATATA	ATATAGCGAT	TACCCAAAAT	ATCACTTTTA	AAATTATAAC	ATAGTCATTA	1560
TTAGTAAGAC	AGTTAAACTT	TTGTATTTAG	TAATTATTTA	CCAAATACAG	CTTTTTCTAA	1620
GTTTGAAATA	CGTTTTAAAA	TATCTACATT	ATTTGAAGAT	GTATTTGTTG	TTGTATTATT	1680
CGAAGAAAAA	CTTTTATTGT	CCTGAGGTCT	TGATGTTGCT	ACACGTAGTC	TTAATTCTTC	1740
TAATTCTTTT	TTAAGTTTAT	GATTCTCTTC	TGATAATTTT	ACAACTTCAT	TATTCATATC	1800
GGCCATTTTT	TGATAATCAG	CAATAATGTC	ATCTAAAAAT	GCATCTACTT	CTTCTCTTCT	1860
ATAGCCACGA	GCCATCGTTT	TTTCAAAATC	TTTTTCATAA	ATATCTTTTG	CTGATAATTT	1920
CAATGAAACA	TCTGACATTT	TTTCCACCTC	ATTAGAAACT	TT		1962

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5253 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

TAACTGGACT ACWACCGCCA ACTRAGTATT GAATTGTTTT AACATGCTTT TCCTGTTTTA 60 AATATTTTTA AACATCTTTC GCATGATTCA ACACTGCTTG CTCCGTTTCA CCAGGCTTCG 120 GTGTATAAGT AATAGCTAAA AATTTATCGT CACCTGCTGA AATAAAGCTA GTGCCTAGTC 180 TCGGTCCTCC AAATACAATA GTTGCAACCA AAATTAATGT ACTTAATATA ATTWCAATCC ACTTATGATT TAATGACCAA TGTAATACTT TTTTATAAGT TGTACTAACA ACACCTAATC 240 300 CTTCTTGATG TTGTTTATTA CGACGTTTAA CGCCTTTTTT AAATAGTGTA GCTGCCAACG CTGGAACGÁG TGTAATTGAC ACTAATAACG ATGCTAATAA ACTAAATGCA ATAGCCAATG 420 CAAAAGGTCT AAACATTTCG CCTACTGAAC CTGATACAAA CACAAGTGGT AAGAAGACGA TAATAGKAAC TAGTGTCGAT GRCATTATTG GTTTAAATAC TTCAGTTGTC GCACTGATAA 480 540 TTAAATTTTC ACCTTTAGT TGGTTCTTCT GAATCTGTTA AGCGTCGATA AATATTTTCA 600 MCAACTACAA TCGAATCGTC TATCACACGT CCAATCGCTA CTGTTAATGC ACCTAACGTT 660 AGTATATTCA ATGAMACATC ACTCAATTTC AGAGCAATAA GCGSCATAAG AAGTGATAAC 720 GGMATCGATA TMATAGAAAT TGCCGTCGTA CGAATGTTTC TTAAAAACAG CAAAATAACT 780 ATAATTGCCA CGRATTGTAC CTAATGATGC TTTTTCAACC ATCGTATAAA GTGATTTCTC 840 AACAGGCTTT GCAGTATCCA TTGTTTTTGT GACATTAAAA TCTTTATTTT CATCAACGAA TGTATCAATT TTACGTTGTA CATCTTTGGC TACTTGAACT GTATTGGCAT CTTGAGCTTT 900 960 AGTTATTTGT AGATTAACCG CATCCTTTCC ATTCGTTTTA GAAATAGAAG TACGCACATC 1020 ACCAACTGTA ATATCAGCTA AATCTCCTAG TTTCGCTGTC GGCATACCAC TTATATTATT 1080 TGGTGCTGAC GCTTTTGAAT TTTGCTGTGG TGATGCCTGA TTAACGTCTG ACATGGCTGA AATTTTGTTT ATTGTCACTT TGGGATTGAG ATTGCCCTTG TCCTCCTGCC AACGTTAATG 1140 1200 GAATATTTAT GTTTTTAAAA GCATCAACAG ATTGATATTG ACCATCAACA ACAATTGATT 1260 TATCTTTATC ACCAAATTGG AACAATCCAA GTGGCGTTGT TCTTGTTGCC GTTTTTAGAT 1320 AGTTTTCTAC ATCATCAGCA GTCAACCCAT ATTTTCAAGT TCATTTTGCT TAAATTTAAG 1380 GGTGATTTCA CGGTTCGTCT GCCCATTTAA TTGCGCATTT TGNACACCAT CTACCGTTTG 1440 CAATTTTGGT ATNAATTGTT CATTCAGTAC TTTCGTTACT TTTTTCAAGT CATTCNCTTT 1500 ATTTGAAAAT GAATATGCTA AAACCGGAAA AGCATCCATC GAATTACGTC NTANTTCTGG 1560 TTGACCAACT TCATCTTTAA ATTTAATTTT NTNTATTTCT NTTNTAAGCT GTTCTTCTGC 1620 TTTATCCAAA TCTGTATTMT TTTCATATTC AACTGTTACA ATTGAAGCAT TTTGTATGGA 1680 TTGCGTTTTA ACATTTTCA CATATGCCAA TGATCTTACY TGAWTGTCAA TTTTACTACT 1740 TATTTCATCT TGGGTACTTT GTGGCGTTGC ACCCGGCATT GTTGTTGTAA CTGAAATAAC 1800 TGGATKTTGT ACATTTGGTA KTAATTCTMA TTTCAATTTA GCACTCGCAT ATACACCGCC 1860 CAAGACAACT WAAACAACCA TTAMAAAGAT AGCAAACYTA TTCCCTAAAA RGAAAATTGT 1920 AATAGCTTTT TTAWCAACAG TMCTYCCCCC TCTTTCACTA WAATTCAAAA AATTATTTTA 1980 CTCAACCATY CTAWWWTGTG TAAAAAAAAT CTGAACGCAA ATGACAGYCT TATGAGCGTT CAGATTTCAG YCGTTAATCT ATTTYCGTTT TAATTTACGA GATATTTTAA TTTTAGCTTT 2040 2100 TGTTAAACGC GGTTTAACTT GCTCAATTAA TTGGYACAAT GGCTGATTCA ATACATAATC 2160 AAATTCACCA ATCTTTTCAC TTAAGTATGT TCCCCACACT TTTTTAAATG CCCATAATCC 2220 ATAATGTTCT GAGTCTTTAT CTGGATCATT ATCTGTACCA CCGAAATCGT AAGTTGTTGC ACCATGTTCA CGTGCATACT TCATCATCGT ATACTGCATA TGATGATTTG GTAAAAAAATC 2280 2340 TCTAAATTCA TTAGAAGACG CACCATATAA GTAATATGAT TTTGAGCCAG CAAACATTAA 2400 TAGTGCACCA GAAAGATAAA TACCTTCAGG ATGTTCCTTT TCTAAAGCTT CTAGGTCTCG 2460 TTTTAAATCT TCATTTTAG CAATTTTATT TTGCGCATCA TTAATCATAT TTTGCGCTTT
TTTAGCTTGC TTTTCAGATG TTTTCATCTT CTGCTGCCAT TTAGCAATTT CGGCATGAAG 2520

TTCATTCAAT TCTTGATTTA CTTTCGCTAT ATTTTCTTTT GGATCCAACT TTACTAAAAA TAGTTCAGCA TCTCCATCTT CATGCAACGC ATCATAAATA TTTTCAAAGT AACTAATATC ACGCGTTAAG AAGCCATCGC GTTCCCCAGT GATTTTCATT AACTCAGCAA ATGTTTTTAA ACCTTCTCTA TCAGATCGTT CTACTGTCGT ACCTCGCTTT AAAGCCAAGC GCACTTTTGA 2760 2820 ACGATTTCGG CGTTCAAAAC TATTTAATAA CTCATCATCA TTTTTATCAA TTGGTGTAAT 2880 CATAGTCATA CGTGGTTGGA TGTAGTCTTT TGATAAACCT TCTTTAAATC CTTTATGTTT
AAAACCAAGC GCTTTCAAAT TTTGCAAAGC ATCTGTRCCT TTATCAACTT CAACATCAGG
ATCGRTTTA ATTGCATACG CTTTCTCAGC TTTAGCAATT TCTTTTGCAC TGTCTAACMA
TGSMTTTAAC GYTTCTTAT TACTATTAAT CAACAACCAA AACCMCGCGR RAWTATWACM 2940 3000 3060 3120 TAGSGTATAA GGTAATTTAG GTACTTTTTT AAAAAGTAAC TGCGCAACAC CCTGGAACTT SMCCGTCACG ACCTACAGCG ATTCTTCGCG CGTACCATCC AGTTAATTTC TTTGTTTCTG CCCATTTCGT TAATTGTAAT AAATCTCCAT TTGGGTGGGR WTTWACAAAT GCGTCATGTT 3180 3240 3300 CCTGATTAGG KGATATGCAT CTTTTCCATG ATTTATGATA TCTCCTTCTA TTTAACAATA 3360 CCTTTAATTA TACAGTTTGT ATCTTATAGT GTCGATTCAG AGCTTGTGTA AGATTTGAAC TCTTATTTTT GGAAATGTCC ATGCTCCAAT TAATAGTTTA GCAAGTTCAA ATTTACCCAT TTTAATTGTG AATCATTTTA TATCTATGTT TCGTGTTAAA TTTAATGTTA TCGTACARTT 3420 3480 3540 AATACTTTTC AACTAGTTAC CTATACTTCA ATATACTTTC ATCATCTAAC ACGATATTCA TTTCTAARAA TGAACCAACT TGACTTCAAT GAATAAATTT TTCCTCAAGC AACCACATTA ATGTTCATAT ACAATTACCC CTGTTATAAT GTCAATAATC TAACAATGAG GTGTTTGATA TGAGAACAAT TATTTTAAGT CTATTTATAA TTATGRACAT CGTTGCAATC ATTATGACAT 3660 3720 3780 TGAGTCAACC TCTCCACCGT GAATTACTTT AGTTTACGGG TTATACTTAT CTTTTTCACA 3840 TTTATATTAT CAATCTTTTT CATTTTAATT AAGTCATCAC GATTAAATAA TATATTAACG ATTMWWTCCA TTGTGCTTGT CATTATTCAT ATGGGCATTC TCGCTCATAG CACTTACGTA 3900 3960 TATTTATACT AATGGTTCAA AGCGATAAAT AGCACCTCTG ATAAAAATTG AATATGGTGA 4020 AGTTGCTTGT GCGTCTTTTA TGATAACCGA ATGATATTTT GAAACTTTAC CATCTTCAAT 4080 TCTAAAATAA ATATCATCAT TTTTTAAAAT CAAATCTGTG TAATGGTCAT TTYKTCHACA ATGTCCATAT CAARCCATTT CAACCAATTC GATACTGTWK GTGATCGGTT TTTACTTTTC 4140 4200 ACAATAACAG TTTCAAWTGA AAATTGTTTT TGAAAATATT TTTGCAATTT TTTAGTACGC 4260 ATGGAATCAC TITCATCCA TIGAATAAAA AATGGTGGCT TAATTTCATC ATCATCCTGA
TTCATTATAT AAAGCAATTG CCACTTTACC TWCACCATCT TTATGTGTAT CTCTTTCCAT
TTGAATCGGC CCTACTACTT CAACCTGCTC ACTNTGTAGT TTATTTTTAA CTGCCTCTAT 4320 4380 4440 ATCATTTGTA CGCAAACAAA TATTTATTAA AGCCTTGCTC ATACTTCTCT TGAACAATTT 4500 GAGTAGCAAA AGCGACTCCG CCTTCTATCG TTTTTGCCAT CTTTTCAAC TTTTCATTAT TTTACTACAT CTAGTAGCTC AAGATAATTT CATTGATATW ACCTAAKKTA TTGAATGTTC 4560 4620 CATATTTATG ATGATACCCA CCTGAATGTA ATTTTATAAC ATCCTCCTGG AAAACTAAAC 4680 CGATCTAACT GATCTATATA ATGAATGATG TGATCANATT TCAATATCAT TAGTATCCCC 4740 CTATTTACAT GTAATTACGC TTATTTTAAA CAAAGTAWAA TTATTTTTGC YCTTAATAAT TATATAKTGA YYYCWAATTG CTCCCGTTTT ATAATTACTA TTGTTGTAAA ARGGTTAGCT 4800 4860 AAGCTAACTA TTTTGCCTTA GGAGATGTCA CTATGCTATC ACAAGAATTT TTCAATAGTT 4920 TTATAACAAT ATAYCGCCCC TATTTAAAAT TAGCCGAGCC GATTTTAGRA AAACACAATA 4980 TATATTATGG CCAATGGTTA ATCTTACGCG ATATCGCTAA ACATCAGCCC ACTACTCTCA 5040 TTGNAATTTC ACATAGACGG GCAATTGAAA AGCCTACTGC AAGAAAAACT TTAAAAGCTC 5100 TAATAGGAAA TGACCTTATW ACAGTAGAAA ACAGNTTAGA GGATAAACNA CAAAAGNTTT 5160 TAACTTTAAC ACCTAAAGGG CATKAATTAT ATGAGATTGT TTGTCTTGAT GNACAAAAGC 5220 TCCNACAAGC AGNNAGTTGC CAAAACAAAG ATT 5253

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

ACATTGAMAA AGATCACCCA TTACAACCAC ATACAGATGC AGTAGAAGTT TAAAACACAT 60 TTTTCTAATT ATCAAAGCTT AGGATAAATA TGATGTCCTA AGCTTTTCCT TTTACAACTT TTTCGAATAA ACAACAGTTA AATATATTCA CCTTTCTACC AAACTTTTTA TCCCCTCATT TAAATTTTAC CGGKYTCATA TAAAATCCTT TAATTCTTTC TTAACATTAW TTTWTWATCT CTACATYTAT TTTAATAAAT AGAACTGCAC ATTTATTCGA AATACTTAGA TTTCTAGTGA 240 300 GATAAACTGC TTTATTTATT ATCATTCATC ATGTAAAATA AGATTTAACT GAAATTTTAG TGTTATTCA CTAATTTTT AAAATGAACG ACATGATGAA CCTAGTTATT AACCAAATCG 420 TTATTAAGTT ACATTATAGA GATGATTGGA ATGAATTTAT CGATATATAC TCCAATACGA TTTTACTAGG GTTAACAATA AATTAAACAA ACATTCTTAG GAGGRATTTT TAACATGGCA 480 540 GTATTTAAAG TTTTTTATCA ACATAACAGA GTACGAGGTR RTTGTGCGTG AAAATACACA 600 ATCACTTTAT GTTGAAGCTC ARACAGAAGA ACAAGTAGCG TCGTTACTTG AAAGATCGTA

ATTTTAATAT CGAATTTATC ACTAAATTAG AGGGCGCACA TTTAGATTAC GAAAAAGAAA ACTCAGCAAC ACTTTAATGT GGAGATTGCT AAATAATGAA ACAATTACAT CCAAATGAAG TAGGTGTATA TGCACTTGGA GGTCTAGGTG AAATCGGTAA AAATACTTAT GCAGTTGAGT ATAAAGACGA AATTGTCATT ATCGATGCCG GTATCAAATT CCCTGATGAT AACTTATTAG 840 900 GGATTGATTA TGTTATACCT GACTACACAT ATCTAGTTCA AAACCAAGAT AAAATTGTTG
GCCTATTTAT AACACATGGT CACGAAGACC ATATAGGCGG TGTGCCCTTC CTATTAAAAC
AACTTAATAT ACCTATTTAT GGTGGTCCTT TAGCATTAGG TTTAATCCGT AATAAACTTG
AAGAAACATC ATTTATTACG TACTGCTAAA CTAAATGAAA TCAATGAGGA CAGTGTGATT 960 1020 1080 1140 AAATCTAAGC ACTTTACGAT TTCTTTCTAC TTAACTACAC ATAGTATTCC TGAAACTTAT 1200 GGCGTCATCG TAGATACACC TGAAGGAAAA KTAGTTCATA CCGGTGACTT TAAATTTGAT 1260 TTTACACCTG TAGGCAAACC AGCAAACATT GCTAAAATGG CTCAATTAGG CGAAGAAGGC GTTCTATGTT TACTTTCAGA CTCAACAAAT TCACTTGTGC CTGATTTTAC TTTAAGCGAA 1320 1380 CGTTGAAGTT GGTCAAAACG TTAGATAAGA TCTTCCGTAA TTGTAAAGGT CCGTATTATA TTTGCTACCT TCGCTTCTAA TATTTACCGA GTTCAACAAG CAGTTGAAGC TGCTATCAAA 1500 AATAACCGTA AAATTGTTAC KTTCGGTCCG TTCGATGGAA AACAATATTA AAATAGKTAT 1560 GGAACTTGGT TATATTAAAG CACCACCTGA AACATTTATT GAACCTAATA AAATTAATAC CGTACCGAAG CATGAGTTAT TGATACTATG TACTGGTTCA CAAGGTGAAC CAATGGCAGC 1620 ATTATCTAGA ATTGCTAATG GTACTCATAA GCAAATTAAA ATTATACCTG AAGATACCGT 1740 TGTATTTAGT TCATCACCTA TCCCAGGTAA TACAAAAAGT TATTAACAGA ACTATTAATT CCTTGTATAA AGCTGGTGCA GATGTTATCC ATAGCAAGAT TTCTAACATC CATACTTCAG 1800 1860 GGCATGGTTC TCAAGGGTGA TCAACAATTA ATGCTTCCGA TTAATCAAGC CGAAATATTT 1920 CTTACCTATT CATGGTGAAT ACCGTATGTT AAAAGCACAT GGTGAGACTG GTGTTGAATG 1980 CGSSKTTGAA GAAGATAATG TCTTCATCTT TGATATTGGA GATGTCTTAG CTTTAACACM CGATTCAGCA CGTAAAGCTG KTCGCATTCC ATCTGGTAAT GWACTTGTTG ATGGTAGTGG 2040 2100 TATCGGTGAT ATCGGTAATG TTGTAATAAG AGACCGTAAG CTATTATCTG AAGAAGGTTT 2160 AGTTATCGTT GTTGTTAGTA TTGATTTTAA TACAAATAAA TTACTTTCTG GTCCAGACAT TATTTCTCGA GGATTTGTAT ATATGAGGGA ATCAGGTCAA TTAATTTATG ATGCACAACG CMAAAWCMAA ACTGATGTTT ATTAGTWAGT TWAATCCAAA ATAAAGAWAT TCAATGGCAT 2220 2280 2340 CAGATTAAAT CTTCTATCAT TGAAACATTA CAACCTTATT TATTKGAAAA AACAGCTAGR 2400 AAACCAATGA TTTTACCAGT CATTATGGAA GGTAAACGAA CAAAARGAAT CAAACAATAA ATAATCAAAA AGCTACTAAC TTTGAAGTGA AGTTTTAATT AAACTCACCC ACCCATTGTT 2460 2520 AGTAGCTTTT TCTTTATATA TGATGAGCTT GAGACATAAA TCAATGTTCA ATGCTCTACA 2580 AAGTTATATT GGCAGTAGTT GACTGAACGA AAATGCGCTT GTWACAWGCT TTTTTCAATT STASTCAGGG GCCCWACAT AGAGAATTTC GAAAAGAAAT TCTACAGGCA ATGCGAGTTG GGGTGTGGGC CCCAACAAG AGAAATTGGA TTCCCCAATT TCTACAGACA ATGTAAGTTG 2640 2700 2760 GGGTGGGACG ACGGAAATAA ATTTTGAGAA AATATCATTT CTGTCCCCAC TCCCGATTAT 2820 CTCGTCGCAA TATTTTTTC AAAGCGATTT AAATCATTAT CCATGTCCCA ATCATGATTA AAATATCACC TATTTCTAAA TTAATATTTG GATTTGGTGA AATGATGAAC TCTTTGCCTC GTTTAATTGC AATAATGTTA ATTCCATATT GTGCTCTTAT ATCTAAATCA ATGATAGACT 2880 2940 3000 GCCCCGCCAT CTTTCAGTT GCTTTCAATT CTACAATAGA ATGCTCGTCT GCCAACTCAA 3060 GATAATCAAG TACACTTGCA CTCGCAACAT TATGCGCNAT ACGTCTACCC ATATCACGCT CAGGGTGCAC AACCGTATCT GCTCCAATTT TATTTAAAAT CTTTGCNTGA TAATCATTTT GTGCTCTTAG CAGTTACTTT TTTTACACCT AACTCTTTTA AAATTAAAGT CGTCAACGTA 3120 3180 3240 3263 CTTGNTTGAA TATTTTCACC AAT

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 510 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

GGGTACCGAG CTCGAATTCG AGGTGTACGG TAGAAATACT TCACCAATGA TGCACTTACA
ATTTTAAATA GATTTTNAAG ACCTTGTTGG TTTTGTACAA TTAATGTGAC ATGACTAGGT 120
CTTGCACGTT TATATGCATC TNCATTACTG AGTTTTTTGT TGATTTCGTT ATGATTTAAT 180
TCATAAATGG CACGGTGATG TTGAACCATT TTNATGAAAA TGTAAGCTGT TGCTTCTGTA 240
AAACCATGTT TACCATATTC AGTATTAATC GTACGNGATA ATTCTAAAGT ATCGNTAACA 360
CCATTCGTTG ATGGTCCAAA CCCAAGACGT TCATATCCCG TATCGATGNN GCCCATATCA 420
AACGGAGCAT TATGCGTTAC GGTTTTCGNA TCGGCAACCC TTCTTAAACT CTGTAAGNAC 480
TTCTTCATTT CAGGGGATCT NCTANCATAT

- INFORMATION FOR SEQ ID NO: 22: (2)
 - SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs nucleic acid (B) TYPE:

(C) STRANDEDNESS: single

TOPOLOGY: (D)

linear

SEQUENCE DESCRIPTION: SEQ ID NO: 22: (xi)

GGGTACCGAG CTCGAATTCT	ACACGCTTTT	CTTCAGCCTT	ATCTTTTTTT	GTCGCTTTTT	60
TAATCTCTTC AATATCAGAG	ATCATCATAA	CTAAATCTCT	AATAAATGTA	TCTCCTTCAA	120
TACGNCCTTG AGCCCTAACO	CATTTACCAA	CANTTAGNGC	TTTAAAATGT	TCTAAATCAT	180
CTTTGTTTTT ACGAGTAAAC	AAAATTTTTA	CTAAAGNGTC	CGTATAGTCA	GTCACTTTAA	240
TTTCTACGGT ATGGNGGCCA	CTTTTAAGTT	CTTTTAAG			278

- INFORMATION FOR SEQ ID NO: 23:
 - (i) SEQUENCE CHARACTERISTICS:

400 base pairs (A) LENGTH: (B) TYPE: nucleic acid

STRANDEDNESS: (C)

single

(D) TOPOLOGY: linear

SEQUENCE DESCRIPTION: SEQ ID NO: 23: (xi)

GGGTACCGAG CTCGAATTCT					60
CAGTAACACC CAAACTTTCA	GGTGTACTAA	ATATCTGCAT	AACTNCTTTA	TCATCTACAG	120
GTATTGTTTT TGGNTCAATT	CCTGATAAAT	CTTGAAGCAT	ACGAATCATT	GTTGGNTCAT	180
CGTGTCCAAG TATATCANGT	TTTAATACAT	TATCATGAAT	AGAATGGAAA	TCAAAATGTG	240
TCGTCATCCA TGCTGAATTT	TGATCATCGG	CAGGATATTG	TATCGGCGTA	AAATCATAAA	300
TATCCATGTA ATCAGGTACT	ACAATAATAC	CCCCTGGNTG	CTGTCCAGTT	GTACGTTTAA	360
CACCTGTACA TCCTTTAACG	NGTCGATCTA	TTTCAGCACC		•	400

- INFORMATION FOR SEQ ID NO: 24: (2)
 - SEQUENCE CHARACTERISTICS:

LENGTH: 528 base pairs (A) nucleic acid (B) TYPE:

(C) STRANDEDNESS: single

TOPOLOGY: (D)

linear

SEQUENCE DESCRIPTION: SEQ ID NO: 24: (xi)

GATCATTTGC A	TCCATAGCT	TCACTTATTT	NTCCAGAAGC	TAGCGTACAA	TCATTTAAAT	60
CTACGCCACC T	TCTTTATCA	ATAGAGATTC	TAAGAAAATN	ATCTCTACCC	TCTTTGACAT	120
ATTCAACGTC T	ACAAGTTCA	AAATTCAAGT	CTTCCATAAT	TGGTTTAACA	ATCACTTCTA	180
CTTGTCCTGT A	ATTTTNCTC	ATACAGGCCT	CCCTTTTTGG	CAAATAGAAA	AGAGCGGGAA	240
TCTCCCACTC T	TCTGCCTGA	GTTCACTAAT	TTTTAAGCAA	CTTAATTATA	GCATAAGTTT	300
ATGCTTGAAA C	AAATGACTT	CACTATTAAT	CAGAGATTCT	TGTAAAAGTT	TGTCCCTTTA	360
TTTCACCATT A	CATTTGAAT	NGNCTCGTNA	GNCATTGTAA	AGAGATNCGG	GCATAATTTT	420
GTGTCCAGCA T	CAATTTTGG	TATTTCTTGT	CTTACGGCTT	ACGGTTNATT	AAATACCTNG	480
GNTTTTTNTC T						528

- (2) INFORMATION FOR SEQ ID NO: 25:
 - SEQUENCE CHARACTERISTICS:

LENGTH: 557 base pairs (A) nucleic acid (B) TYPE: STRANDEDNESS: single (C)

TOPOLOGY: (D)

linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

CAGCCGACAG	TTNACAACCA	GCNTCACCGT	NAGACAGCAA	ACGCCACAAA	CTACAAGGNT	60
CCAAATGNCT	AGACAATACT	GGTGNAAGGC	ANGTAATAAT	ACGACATTAA	CATTTGATGA	120
TCCTGCCATA	TCAACAGNTC	AGAATAGACA	GGATCCAACT	GTAACTGTTA	CAGATAAAGT	180
AAATGGTTAT	TCATTAATTA	ACAACGGTAA	GATTGGTTTC	GTTAACTCAG	AATTAAGACG	240
AAGCGATATG	TTTGATAAGA	ATAACCCTCA	AAACTATCAA	GCTAAAGGAA	ACGTGGCTGC	300
ATTAGGTCGT	GTGAATGCAA	ATGATTCTAC	AGATCATGGT	AACTTTAACG	GTATTTCAAA	360
AACTGTAAAT	GTAAAACCAG	NTTCAGAATT	AATTATTAAC	TTTACTACTA	TGCAAACCGG	420
			TTAAAGGATG			480
GCACCTGTAA	AATGTTGCTT	AGGCTGGTCC	TGCACATTTA	TTTTAAGGTC	CNNCTTGTNC	540
TGNTNGGCTC	TNGGGGG					557

(2) INFORMATION FOR SEQ ID NO: 26:

(i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	527 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TODOLOGY.	linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

~~~~~~~~		COMMON A A CONTRACT	A MOMOO A CMA	CCACTCTTAC	CAACATTTAC	60
GTCGATCAGC	ATCATTGGTA	CTTTAAATAA.	AIGIGCAGIA	CCAGICIIAG	CAACATITAC	
AGTTGCTAAT	TCAGTATTTT	CNTTAGCATC	TTTAATAACT	AANTTTNTNG	CACCTTGCNT	120
ACTATTCGTT	TGCATAGTAG	TAAAGTTAAT	AATTAATTCT	GANTCTGGTT	TTACATTTAC	180
AGTTTTTGAA	ATACCGTTAA	AGTTACCATG	ANCTGTAGNA	TCATTTGCNT	TCACACGGCC	240
TAATGCAGCC	NCGGTTCCTT	TAGCTTGATA	GTTTTGAGGG	GTATTCTTAT	CAAACATATC	300
GNTTCGGCTT	AATTCTGAGG	TAACTGGNAC	CNATCTTTAC	CNTTGTTAAT	TAATGGNTTC	360
CCCTTTACNT	TAATCTGTAA	CAGTTACAGT	TGGGTCCCCG	TCTATTCTCA	TCTGTTGGTA	420
TGGCAGGGTC	ACCACAATGN	TAATGTCGGT	TTATACTGGN	NTCNCCCGNA	TTGCTTAGGT	480
	NGGTGTGCGN					527

## (2) INFORMATION FOR SEQ ID NO: 27:

# (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	578 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27:

TGTGAGCTCC CATNACCACC	AGTGCGNNCA	TTGCCTGGGC	TACCGATTGT	CAATTTAAAG	60
TCTTCATCTT TAAAGAAAAT	TTCAGTACCA	TGTTTTTTAA	GTACAACAGT	TGCACCTAAA	120
CGATCAACTG CTTCACGATT	ACGCTCATAT	GTCTGTTCCT	CAATAGGAAT	ACCACTTAAT	180
CGTTCCCATT CTTTGAGGTG	TGGTGTAAAG	ATCACACGAC	ATGTAGGTAA	TTGCGGTTTC	240
AGTTTACTAA AGATTGTAAT	CGCATCGCCG	TCTACGATTA	AATTTTGATG	CGGTTGTATA	300
TTTTGTAGTA GGAATGTAAT	GGCATTATTT	CCTTTGAAAT	CAACGCCAAG	ACCTGGACCA	360
ATTAGTATAC TGTCAGTCAT					420
ATAACCATCG CTTCTGGGCA	ACGAGAATGT	AATGCTGAAT	GATTTGTTGG	ATGTGTAGTA	480
CAGTGATTAA ACCACTACCG	CTAAATACAC	ATGCACCGAG	CCGCTAACAT	AATGGCACCA	540
CCTAAGTTAG CAGATCGGCC					578

# (2) INFORMATION FOR SEQ ID NO: 28:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	534 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28:

CGAGCCAGCA	GNTTGCAGCG	GCGTGTCCCA	TAACTAAGGT	GGTGCCATTA	TGTNAGCGGC	60
		GTAGTGGTTT				120
		GCCCAGAAGC				180
		TGACTGACAG				240
		TTNCATTCCT				300
		TTNCAATCTT				360
		ACCTCAAAGG				420
		ATCGTGNAGC				480
		CCTTTAANGN				534

## (2) INFORMATION FOR SEQ ID NO: 29:

#### (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	565 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29:

ACCATTCACA	GTGNCATGCA	TCATTGCACA	CCAAATGNTG	TTTGAAGAGG	TGTTTGTTTG	60
TATAAGTTAT	TTAAAATGAC	ACTAGNCATT	TGCATCCTTA	CGCACATCAA	TAACGACACG	120
CACACCAGTA	CGTAAACTTG	TTTCATCACG	TAAATCAGTG	ATACCGTCAA	TTTTCTTGTC	180
ACGAACGAGC	TCTGCAATTT	TTTCAATCAT	ACGAGCCTTA	TTCACTTGGA	AAGGAATTTC	240
AGTGACAACA	ATACGTTGAC	GTCCGCCTCC	ACGTTCTTCA	ATAACTGCAC	GAGAACGCAT	300
TTGAATTGAA	CCACGNCCTG	TTTCATATGC	ACGTCTAATA	CCACTCTTAC	CTAAAATAAG	360
TCCNGCAGTT	GGGGAATCAG	GACCTTCAAT	ATCCTCCATT	AACTCAGCAA	ATTGNAATNT	420
CAAGGGGTCT	TTACTTTAAG	GCTNAGNNCA	CCCTTGGTTA	ATTCTGTTAA	GTTATTGTGG	480
TGGGATATTT	CGGTTGCCAT	NCCTNCCNCG	GGTACCCNNA	TGCACCCNTT	GGGTAATNAG	540
GNTTGGGGGT	TTGTGCCCGG	TAAGC				565

#### (2) INFORMATION FOR SEQ ID NO: 30:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	558 base pair	rs
(B).	TYPE:	nucleic acid	
(C)	STRANDEDNESS:	single	
(D)	TOPOLOGY:	linear	

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30:

CGCAAAACGT	CANCAGAANG	NACTNCCTAA	TGCACTAATG	AAGGGCGGTA	TTAAATCGTA	60
CGTTGAGTTA	TTGANCGNAA	AATAAAGGAA	CCTATTCATG	AATGAGCCAA	TTTATATTCA	120
TCAATCTAAA	GATGATATTG	ANGTAGAAAT	TGCNATTCAN	TATAACTCAG	GATATGCCAC	180
AAATCTTTTA	ACTTACGCAA	ATAACATTCA	TACGTATGAN	GGTGGTACGC	ATGANGACGG	240
ATTCAAACGT	GCATTTACGC	GTGTCTTAAA	TAGTTATGGT	TTAAGTAGCA	AGATTNTGTA	300
AGANGGAAAA	GNTAGNCTTT	CTGGTGAAGN	TACACGTGAA	GGTATNNCNG	CNNTTNTATC	360
TNTCAAACNT	GGGGNTCCNC	AATTNGGAGG	TCAAACGGGG	CAAAAATTTG	GGNNTTCTGT	420
AGTGCGTCAN	GTTGTNGGTN	AATTATTCNN	NGNGNCTTTT	TACNGTTTTN	CTTTGNAAAT	480
CCNCNAGTCG	GNCGTNCNGT	GGTTTNNAAA	AGGGTTTTTT	GNGGCACGTG	NACGTGTTNT	540
TCGGAAAAA						558

# (2) INFORMATION FOR SEQ ID NO: 31:

# (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	1508 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY ·	linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:

AGTSGWTCCG TGTGCATAGG TRTGAACTTT GAACCACCAC GTTTAATTTC ATCGTCACAA ATATCTCCAA AACCAAGCTC GTCGATAATC ATCTGTATCA TTGTTAATCT GTGCTGAACG TCTATAAAAT CATGGTGCTT TTTCAATGGA GACATAAAAC TAGGTAAAAA ATAAAATTCA TCTGGCTGTA ATTCATGAAA TACTTCGCTA GCTACTATCA TATGTGCAGT ATGGATAGGG 120 180 240 TTAAACTGAC CGCCGTAAAG TACTATCTTT TTCATTATTA TGGCAATTCA ATTTCTTTAT 300 TATCTTTAGA TTCTCTATAA ATCACTATCA TAGATCCAAT CACTTGCACT AATTCACTAT 360 GAGTAGCTTC GCTTAATGTT TCAGCTAATT CTTTTTTATC ATCAAAGTTA TTTTGTAGTA CATGTACTTT AATCAATTCT CTGTTTTCTA ACGTATCATC TATTTGTTTA ATCATATTTT 420 480 CGTTGATACC GCCTTTTCCA ATTTGAAAAA TCGGATCAAT ATTGTGTGCT AAACTTCTTA 540 AGTATCTTTT TTGTTTGCCA GTAAGCATAT GTTATTCTCC TTTTAATTGT TGTAAAACTG 600 CTGTTTCAT AGAATTAATA TCAGCATCTT TATTAGTCCA AATTTTAAAG CTTTCCGCAC CCCTGGTAAA CAAACATATC TAAGCCATTA TAAATATGGT TTCCCTTGCG CTCTGCTTCC TCTAAAATAG GTGTTTTATA CGGTATATAA ACAATATCAC TCATTAAAGT ATTGGGAGAA 660 720 780 AGATGCTTTA AATTAATAAT ACTTTCGTTA TTTCCAGCCA TACCCGCTGG TGTTGTATTA 840 ATAACGATAT CGAATTCAGC TAAATAACTT TTCAGCATCT GCTAATGAAA TTTGGTTTAT ATTTAAATTC CAAGATTCAA AACGAGCCAT CGTTCTATTC GCAACAGTTA ATTTGGGCTT 900 960 TACAAATTTT GCTAATTCAT AAGCAATACC TTTACTTGCA CCACCTGCGC CCAAAATTAA AATGTATGCA TTTTCTAAAT CTGGATAAAC GCTGTGCAAT CCTTTAACAT AACCAATACC 1020 1080 ATCTGTATTA TACCCTATCC ACTTGCCATC TTTTATCAAA ACAGTGTTAA CTGCACCTGC ATTAATCGCT TGTTCATCAA CATAATCTAA ATACGGTATG ATACGTTCTT TATGAGGAAT 1140 1200 TGTGATATTA AAGCCTTCTA ATTCTTTTTT CGAAATAATT TCTTTAATTA AATGAAAATC 1260 TTCAATTGGA ATATTTAAAG CTTCATAAGT ATCATCTAAT CCTAAAGAAT TAAAATTTGC
TCTATGCATA ACGGGCGACA AGGAATGTGA AATAGGATTT CCTATAACTG CAAATTTCAT
TTTTTTAATC ACCTTATAAA ATAGAATTTC TTAATACAAC ATCAACATTT TTAGGAACAC
GAACGATTAC TTTAGCCCCT GGTCCTATAG TTATAAAGCC TAGACCAGAG ATCGACCTGC 1320 1380 1440 1500 AGGCAGCA

#### (2) INFORMATION FOR SEQ ID NO: 32:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1810 base pairs (B) TYPE: nucleic acid

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32:

CGCGTCTTCC AAATTTCNAA AGCTGTAAAA AGTTATTAAA TCAAATCTTG CGAATTTGGA TNTAGAGGCA CAATCTGANG TTTATAAAAN TAATGCAGAT AGAGCTTTAA AAGCNTTGTC AAAACGTGAT ATTCAATTTG ATNTCATTTT CTTAGATCCA CCTTATAATA AAGGTCTCAT 120 180 TGATAAAGCT TTAAAACTAA TTTCAGAGTT TAATTTATTG AAAGAAAATG GTATCATCGT 240 TTGTGAATTT AGCAATCATG AAGAAATAGA TTATCAACCG TTTAATATGA TTAAACGTTA
CCATTATGGG TTGACAGACA CATTGTTATT AGAAAAGGGA GAATAGCATG GAACATACAA
TAGCGGTCAT TCCGGGTAGT TTTGACCCCA TTACTTATGG TCATTTAGAC ATTATTGAGA 300 360 420 GAAGTACAGA TAGATTTGAT GAAATTCATG TCTGTGTTCT TAAAAATAGT AAAAAAGAAG 480 GTACGTTTAG TTTAGAAGAG CGTATGGATT TAATTGAACA ATCTGTTAAA CATTTACCTA ATGTCAAGGT TCATCAATTT AGTGGTTTAC TAGTCGATTA TTGTGAACAA GTAGGAGCTA 540 600 AAACAATCAT ACGTGGTTTA AGAGCAGTCA GTGATTTTGA ATATGAATTA CGCTTAACTT 660 CMATGAATAA AAAGTTGAAC AATGAAATTG AAACGTTATA TATGATGTCT AGTACTAATT ATTCATTTAT AAGTTCAAGT ATTGTTAAAG AAGTTGCAGC TTATCGAGCA GATATTTCTG AATTCGTTCC ACCTTATGTT GAAAAGGCAT TGAAGAAGAA ATTTAAGTAA TAAAAATAAC 720 780 840 AGTATTTTAG GTTTATCATG GTTTACAATC CTAAAATACT GTTTTCATTT GTTAACGATA 900 TTGCTGTATG ACAGGCGTGT TGAAATCTGT TTGTTGTTGC CCGCTTATTG CATTGTATAT GTGTGTTGCT TTGATTTCAT TTGTGAAGTA ATGTGCATTG CTTTTGTTAA TATTGGTTAT ATATTGTCTT TCTGGGAACG CTGTTTTTAA ATGCTTTAAA TATTGTCTGC CACGGTCGTT 960 1020 1080 CATCGCTAAT ACTTTAACTG CGTGAATGTT ACTCGTAACA TCTGTAGGTT TAATGTTTAA 1140 TAATACATTC ATTAACAGTC TTTGGATATG CGTATATGTA TAACGCTTTG TTTTTAGTAA
TTTTACAAAA TGATGAAAAT CAGTTGCTTC ATAAATGTTA GATTTCAAAC GATTTTCAAA
ACCTTCAGTA ACAGTATAAA TATTTTTTAA TGAATCTGTA GTCATAGCTA TGATTTGATA 1200 1260 1320 TTTCAAATAT GGAAATATTT GATTTAATGT WATATGAGGT GTTACGTACA AGTGTTGAAT 1380 ATCTTTAGGT ACCACATGAT GCCAATGATC ATCTTGACTA ATGATTGATG TTCTAATAGA TGTACCACTT SCAAACTGAT GGTGTTGAAT TAATGAATCA TGATGTTGAG CATTTTCTCG TTTGATAGAA ATTGCATTGA TGTTTTTAGC ATTTTTAGCA ATTGCTTTCA GGTAACTAAT 1440 1500 1560 ACCAAGTATG TTGTTAGGAC TTGCTAGTGC TTCATGATGC TCTAATAATT CGCTAATGAT 1620 ACGAGGGTAG CTTTTACCTT CTTTTACTTT TNGTGAAAAG GATTCAGATN GTTCAATTTC ATTAATNCTG NGTGCTAATT GCTTTAANGT TTNGATATCA TTATTTTCAC TACCAAATGC 1680 1740

#### (2) INFORMATION FOR SEQ ID NO: 33:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1876 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33:

TCTGAATGAT CTARACGGAT TAAATTATTT AGCTGGTAAA ACAATCGACG AAGTTAACAC AAAAGCATTC GAAGGTACAT TATTAGCGCA TACTGATGGT GGTGTTCCTA ACATGGTAGT 60 120 GAACATTCCA CAATTAGATG AAGAAACTTT CGGTTACGTC GTATACTTCT TCGAACTTGC 180 TTGTGCAATG AGTGGATACC AATTAGGCGT AAATCCATTT AACCAACCTG GTGTAGAAGC 240 ATATAAACAA AACATGTTCG CATTATTAGG TAAACCTGGT TTTGAAGACT TGAAAAAAGA ATTAGAAGAA CGTTTATAAA ATACATTACT TCAAAGATTA GTGAAGTTTG AAAAGATAGA ACTAGACGTT AACTATTTAA AGCATATTTT CGAGGTTGTC ATTACAAATG TAAAAATGTA 300 360 420 ATGACAACCT CGTTTTTATT TATATGCAAG AACTAGGTTA CTAGCTAATG TGACAAGATG TTWAGAGAAA ATTAAAGATA AAATAATATC TGCCTTACAA TAATATTGTT ATACTACTAG 480 540 AGACTGATTT ATTAGCATGA TTACATGTTA ATGTTTCTTT ACTTAGTAAT TAACTTTRTA 600 ATGTAARAHT AATTATCTTC ADCCAHAGAA AGGGATTGAT GATTTGTCGT WTCMTCAATT 660 AGAAGAATGG TTTGAGATAT KTCGACAGTT TGGTTWTTTA CCTGGATTTA TATTGTTATA
TATTAGAGCT NTAATTCCAG TATTTCCTTT ARCACTCTAT ATTTTAATTA ACATTCAAGC
TTATGGACCT ATTTTAGGTA TATTGATTAG TTGGCTTGGA TTAATTTCTG GAACATTTAC 720 780 840 AGTCTATTTG ATCTGTAAAC GATTGGTGAA CACTGAGAGG ATGCAGCGAA TTAAACAACG 900 TACTGCTGTT CAACGCTTGA TTAGTTTTAT TGATCGCCAA GGATTAATCC CATTGTTTAT
TTTACTTTGT TTTCCTTTTA CGCCAAATAC ATTAATAAAT TTTGTAGCGA GTCTATCTCA
TATTAGACCT AAATATTATT TCATTGTTTT GGCATCATCA AAGTTAGTTT CAACAATTAT 960 1020 1080 TTTAGGTTAT TTAGGTAAGG AAATTACTAC AATTTTAACG CATCCTTTAA GARGGATATT AATGTTAGTT GGTGTTGGTT GTATTTTGGA TTGTTGGAAA AAAGTTAGAA CAGCATTTTA 1140 1200 TGGGATCGAA AAAGGAGTGA CATCGTGAAA AAAGTTGTAA AATATTTGAT TTCATTGATA 1260 CTTGCTATTA TCATTGTACT GTTCGTACAA ACTTTTGTAA TAGTTGGTCA TGTCATTCCG 1320 AATAATGATA TGYMCCCAAC CCTTAACAAA GGGGATCGTG TTATTGTWAA TAAAATTAAA GTAACATTTA ATCAATTGAA TAATGGTGAT ATCATAACAT ATAGGCGTGG TAACGGAGAT 1380 1440 ATATACTAGT CGAATTATTG CCAAACCTGG TCAATCAATG GCGTTTCGTC AGGGACAATT 1500 ATACCGTGAT GACCGACCGG TTGACGCATC TTATGCCAAG AACAGAAAAA TTAAAGATTT TAGTTTGCGC AATTTTAAAG AATTAGGATG GTGATATTAT TCCGCCAAAC AATTTTGTTG TGCTAAATGA TCAAGATAAT AACAAGCACG ATTCAAGACA ATTTGGTTTA ATCGATAAAA 1560 1620 1680 AGGATATTAT TGGTAATGTT AGTTTACGAT ACTATCCTTT TTCAAAATGG ACTGTTCAGT 1740 TCAAATCTTA AAAAGAGGTG TCAAAATTGA AAAAAGAAAT ATTGGAATGG ATTATTTCAA TTGCAGTCGC TTTTGTCATT TTATTTATAG TAGGTAAATT TATTGTTACG CCATATACAA 1800 1860 1876 TTAAAGGTGA ATCAAT

## (2) INFORMATION FOR SEQ ID NO: 34:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2687 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

TATGATGATG GTAAAGATCC TAAAGGATTA CCTAAAGCTG ATATTGTTTT ACTTGGTATT TCGAGAACTT CAAAGACACC ATTATCTCAG TATTTAGCGC ATAAGAGTTA CAAAGTTATG 60 120 AATGTACCGA TTGTACCAGA AGTGACACCG CCAGATGGCT TATATGATAT TAATCCAAAG 180 AAATGTATCG CACTTAAAAT AAGTGAAGAA AAATTAAATC GCATTAGAAA AGAGCGACTA AAACAATTAG GACTAGGTGA CACAGCTCGA TATGCAACAG AAGCACGAAT TCAAGAAGAA 240 300 TTGAATTACT TTGAAGAAAT CGTAAGTGAA ATTGGATGTC CTGTCATTGA TGTTTCTCAA 360 AAAGCAATCG AAGAAACAGC AAACGATATA ATCCATTATA TTGAACAAAA TAAATCGAAA 420 TGATTTCATT TTTGTCGAAA ATTAGGTATA ATAGTATAAC TAATGCTTAA TAGGTGATTT AATTTGCGAA TAGATCAATC GATCATTAAT GAAATAAAAG ATAAAACCGA CATTTTAGAC 480 540 TTGGTAAGTG AATATGTWAA ATTAGAAAAG AGAGGACGCA ATTATATAGG TTTGTGTCCT 600 TTTCATGATG AAAAGACACC TTCATTTACA GTTTCTGAAG ATAAACAAAT TTGTCATTGT TTTGGTTGTA AAAAAGGTGG CAATGTTTTC CAATTTACTC AAGAAATTAA AGACATATTC 720 ATTTGTTGAM GCGGTTAAAG AATTAGGTGG WTAGRGTTAA TGTTTGCTGT AGRTATTGAG 780 GCAMCACAAT CTTWACTCAA ATGTYCAAAT TSCTTCTSRY GRTTTACAAA TGATGACAW TGCATGGRGT TAWTACAAGR ATTTTATTAT TACGCTTTAA CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTCATGATT TTCTTCAAAA AAAGGGTTAC 840 900 960 1020 GATATTGAAT TAGCATATGA AGCCGGATTA TWATCACGTA ACGAAGAAAA TTTCAGTTAT TTACGATAGA TTYCGAAAYC GTATTATGTT YCCTTTGAAA AATGCGCAAG GAAGAATTGT TGGATATTCA GGTCGAACAT ATACCGGTCA AGAACCAAAA TACTTAAATA GTCCTGAAAC 1140 1200 ACCTATCTTT CAAAAAGAA AGTTGTTATA CAACTTAGAT AAAGCGCGTA AATCAATTAG 1260 AAAATTAGAT GAAATCGTAT TACTAGAAGG TTTTATGGAT GTTATAAAAT CTGATACTGC TGGCTTGAAA AACGTTGTTG CAACAATGGG TACACAGTTG TCAGATGAAC ATATTACTTT TATACGAAAG TTAACATCAA ATATAACATT AATGTTTGAT GGGGATTTTG CGGGTAGTGA 1320 1380 1440 AGCAACACTT AAAACAGGTY CAAAATTTGT TACAGCAAGG GCTAAATGTR TTTKTTATAC 1500 AGCAACACTI AAAACAGGII CAAAATIIGI IACAGCAAGG GCTAAATII ITRITATACACATTI AAAACAGGII CAAAATIIGI IACAGCAAGG GCTAAATII ITRITATACACATTI AAAAAAATGAC AAAAAAGTCAT TTSCACATTA TAAAGTGAGT ATATTAAAAGATGAAAATTGC ACATAATGAC CTTTCATATG AACGTTATTT GAAAGAMCTA AGTCATGATA 1560 1620 1680 TTTCGCTTAT GAAATCATCG ATTTTGCAAC AAAAGGCTTT AAATGATGTT GCACCATTTT 1740 TCAATGTTAG TCCTGAGCAA TTAGCTAACG AAATACAATT CAATCAAGCA CCAGCCAATT ATTATCCAGA AGATGAGTAT GGCGGTTACA TTGAACCTGA GCCAATTGGT ATGGCACAAT 1800 1860 TTGACAATTT GAGCCGTCAA GAAAAAGCGG AGCGAGCATT TTTAAAACAT TTAATGAGAG ATAAAGATAC ATTTTTAAAT TATTATGAAA GTGTTGATAA GGATAACTTC ACAAATCAGC 1980 ATTTTAAATA TGTATTCGAA GTCTTACATG ATTTTTATGC GGAAAATGAT CAATATAATA TCAGTGATGC TGTGCAGTAT GTTAATTCAA ATGAGTTGAG AGAAACACTA ATTAGCTTAG AACAATATAA TTTGAATGAC GAACCATATG AAAATGAAAT TGATGATTAT GTCAATGTTA 2040 2100 2160 TTAATGAAAA AGGACAAGAA ACAATTGAGT CATTGAATCA TAAATTAAGG GAAGCTACAA GGATTGGCGA TGTAGAATTA CAAAAATACT ATTTACAGCA AATTGTTGCT AAGAATAAAG AACGCATGTA GCATGTGATT TTAAAGAATA ATACGAATAA TGATTATGTC AAAATGATAA 2220 2280 2340 AGGGTAAATG ATAGTTACCG CATTTAAACA ACACTATTGA AAAATAAATA TTGGGATTAG 2400 TTCCAATTTG TAAAATAAA TTAAAAATAT GGATGAATTA ATTAAGAATT TAGTTTAAAA TAGCAATATT GAATAAATTT CGAATGTTCA TATTTAAAAT CGGGAGGCCG TTTCATGTCT 2460 2520 GATAACACAG TTAAAATTAA AAAACAAACA ATTGATCCGA CATTAACATT AGAAGATGTT 2580 AAGAAGCAAT TAATTGAAAA AGGTAAAAAA GAGGGTCATT TAAGTCATGA AGAAATTGCT 2640 GAAAAACTTC AGAATTTTGA TATCGACTCT GATCAAATGG ATGATTT 2687

# (2) INFORMATION FOR SEQ ID NO: 35:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2800 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

NTNAATTAAC ATGCGAGGNC ACCCCTTTAT TGCTACTCCA TACTTCTCAT AAAATCATAT TAACATAACA CCCTTAATTG TCAGACTATT NAAATAAATA AAACACTTCA TTTTTACGCA TTTCTGCCAA ATTAAGATGA AGTAAAAGCT AAGTCGACCT AAAAAAGCAC CCTTCTAGTC 120 GATTAATCTA AAAGGGGTGC CATATACTTT AATTTTAATA CATGATTGAT TCTAAAAAAG 240 TGAATTATTC CACAGTAACT GATTTAGCAA GGTTACGTGG TTTATCAACA TCTAAATCTC
TGTGTAATGC TGCATAGTAT GAAATTAATT GTAATGCAAC CACTGATACT AATGGCGTTA
ACAATTCATG TACATGAGGA ATGACATAAG TGTCGCCTTC TTTTTCAAGA CCCTCCATAG
AAATAATACA TGGATGTGCA CCACGTGCTA CTACCTCTTT AACGTTACCA CGAATTGATA 300 360 420 480 AATTAACTTT CTCTTGTGTT GCTAAACCTA CAACTGGTGT ACCTTCTTCG ATTAAGGCAA TTGTACCATG TTTAAGTTCT CCACCAGCAA AACCTTCTGC TTGAATGTAA GAAATTTCTT 540 600 TAAGTTTTAA CGCACCTTCT AAACTTACGT TATAGTCAAT AGTACGTCCG ATAAANAATG 660 CATTGCGTGT TGTTTCTAAG AAATCTGTAG CAATTTGTTC CATAATTGGT GCATCGTCAA 720 CAATTGCTTC TATTGCTGTT GTTACTTTTG CTAATTCTCT CAATAAATCA ATATCTGCTT CACGACCATG CTCTTTTGCA ACGATTTGAG ACAAGAWTGA TAATACTGCA ATTTGTGCAG 780 840 WATAWGCTTT TGTAGATGCA ACTGCGAWTT CAGGGACCCG CGTGTAATAA CAATGTGTGG 900 TCTGCTTCAC GTTGATAAAG TTGAACCTGC AACATTAGTG ATTGTTAATG AWTTATGAMC 960 TAATTTATTA GTTWCAACTA AATACGGCGC GGCTATCTGG CAGTTTCACC TGATTGAGAA ATATAAACGA ACAATGGTTT TTAAGATAAT AATGGCATGT TGTAGACAAA CTCTGATGCA 1020 1080 ACGTGTACTT CAGTTGGTAC GCCAGCCCAT TTTTCTAAAA ATTCTTTACC TACTAAACCT 1140 GCATGGTAGC TTGTACCTGC TGCAATAACG TAAATGCGGT CTGCTTCTTT AACATCATTG
ATGATGTCTT GATCAATTTT CAAGTTACCT TCTGCATCTT GATATTCTTG AATAATACGA
CGCATTACTG CTGGTTGTTC ATGAATTTCT TTTAACATGT AGTGTGCATA AACACCTTTT 1200 1260

TCAGCATCTG ATGCATCAAT TTCAGCAATA TATGAATCAC GTTCTACAAC GTTTCCATCT GCATCTTTAA TAATAACTTC ATCTTTTTTA ACAATAACGA TTTCATGGTC ATGGRTTTCT 1440 TTATATTCGC TTGTCACTTG TAACATTGCA AGTGCGTCTG ATGCGATAAC ATTGAAACCT 1500 TCACCAACAC CTAATAATAA TGGTGATTTA TTTTTTAGCAA CATAGATTGT GCCTTTGHCT 1560 TCAGCATCTA ATAAACCTAA TGCATATGAA CCATGTAATA ATGACACAAC TTTTGTAAAT GCTTCTTCAG TTGAAAGTCC TTGATTTGAA AAGTATTCAA CTAATTGAAC GATAACTTCT 1680 GTATCTGTTT CTGAAATGAA TGATACACCT TGTAAGTATT CACCTTTTAA CTCTTCATAG 1740 TTTTCAATAA CACCGTTATG AACTAGAGTA AAACGGCCAT TTGATGATTG ATGTGGATGA 1800 GAGTTTTCAT GATTCGGTAC ACCGTGTGTT GCCCAACGTG TGTGACCGAT TCCAACAGGT 1860 CCATTCAAAA TCGCTACTAT CAGCAACTTT ACGTAATTCT GCAATACGAC CTTTTTCTTT 1920 AAATACAGTT GTATTATCAT YATTTACTAC TGCGATACCT GCAGAGTCAT AACCTCTGTA
TTCTAATTTT TCTACAACCT TTTAATAATA ATTTCTTTGG CATTATCATA GCCAATATAA
CCAACAATTC CACACATAAC GACATTTCC TCCATATTGG AATAGTACGS GTAAATTATG 1980 2040 2100 ATTTATTGCC GATAATTTAG ATTGACAATC TGCTTTCATA ATATAAATAG GAACATGCTA 2160 TCATCGCATT CATCCATAAC AAATTAAGCA TAGTTATTTT TACAACTATA CAAATTGCTC ACACTGTACT TTCCATATTA ATATTTTTTA TATTCAATTT CTGGCGATCT TATTAACTTT GTCCATTAAG TCACCCTAAT GTTTTACTTA ATAAGCTAAC GAATGAGCCA CATCCGGGAT 2220 2280 2340 AGCATCCGCC GATCTATTCG ATCACTATCC TCTTCGTCTA CAAATACATA TATTGCACTC 2400 TATAAAGGCC ACTCATATAT TAACCTTTAA TCTTCAAATA CAAATATTTA TTTGCACAGG CGCTTTAACT GTACTGCCGA ACTTTCCCCC TTTCCATTAA TCATTATTGT ACAACGGTGT 2460 2520 TGTTTTGTTT TGCAAATAT TTCACAATAA AATTTTAAAA ATCCTAAAAC AATTTTTTTG 2580 TTTTACTTTT TCAAAATATC TATACTGTCA CATTGATGAC ACTTTATTTA ATTTTGTCAC 2640 ATTTATTTTG ACAAAGTTGA TTTTTGTTTA TATTGAGTAA CAAGTAACCT CTCTATACAC TATATATAGT CACATATATT AAAAAAGAGG TGTAAACATG TCACAAACTG AAGAGAAAAA 2700 2760 2800 AGGAATTGGT CGTCGTGTTC AAGCATTTGG ATCGACCGCA

#### INFORMATION FOR SEQ ID NO: 36: (2)

(D)

## (i) SEQUENCE CHARACTERISTICS:

TOPOLOGY:

LENGTH: 2934 base pairs (A) nucleic acid (B) TYPE: STRANDEDNESS: single (C) linear

#### SEQUENCE DESCRIPTION: SEQ ID NO: 36: (xi)

CATGAAATGC AAGAAGACG TCGTATTTGT TATGTAGCAA TTACAAGGGC TGAAGAGGTG 60 TTATATATCA CTCATGCGAC ATCAAGAATG TTATTTGGTC GCCCTCAGTC AAATATGCCA 120 TCCAGATTTT TAAAGGAAAT TCCAGAATCA CTATTAGAAA ATCATTCAAG TGGCAAACGA CAAACGATAC AACCTAAGGC AAAACCTTTT GCTAAACGCG GATTTAGTCA ACGAACAACG 180 240 TCAACGAAAA AACAAGTATT GTCATCTGAT TGGAATGTAG GTGACAAAGT GATGCATAAA 300 GCCTGGGGAG AAGGCATGGT GAGTAATGTA AACGAGAAAA ATGGCTCAAT CGAACTAGAT 360 ATTATCTTTA AATCACAAGG GCCAAAACGT TTGTTAGCGC AATTTGCACC AATTGAAAAA AAGGAGGATT AAGGGATGGC TGATTTATCG TCTCGTGTGA ACGRDTTACA TGATTTATTA 420 480 AATCAATACA GTTATGAATA CTATGTAGAG GATAATCCAT CTGTACCAGA TAGTGAATAT 540 GACAAATTAC TTCATGAACT GATTAAAATA GAAGAGGAGC ATCCTGAGTA TAAGACTGTA GATTCTCCAA CAGTTAGAGT TGGCGGTGAA GCCCAAGCCT CTTTCAATAA AGTCAACCAT GACACGCCAA TGTTAAGTTT AGGGAATGCA TTTAATGAGG ATGATTTGAG AAAATTCGAC 600 660 720 CAACGCATAC GTGAACAAAT TGGCAACGTT GAATATATGT GCGAATTAAA AATTGATGGC TTAGCAGTAT CATTGAAATA TGTTGATGGA TACTTCGTTC AAGGTTTAAC ACGTGGTGAT 780 840 GGAACAACAG GTTGAAGATA TTACCGRAAA TTTAAAAAACA ATTCATGCGA TACCTTTGAA 900 AATGAAAGAA CCATTAAATG TAGAAKTYCG TGGTGAAGCA TATATGCCGA GACGTTCATT 960 TTTACGATTA AATGAAGAAA AAGAAAAAAA TGATGAGCAG TTATTTGCAA ATCCAAGAAA 1020 CGCTGCTGCG GGATCATTAA GACAGTTAGA TTCTAAATTA ACGGCAAAAC GAAAGCTAAG CGTATTTATA TATAGTGTCA ATGATTTCAC TGATTTCAAT GCGCGTTCGC AAAGTGAAGC 1080 ATTAGATGAG TTAGATAAAT TAGGTTTTAC AACGAATAAA AATAGAGCGC GTGTAAATAA 1200 TATCGATGGT GTTTTAGAGT ATATTGAAAA ATGGACAAGC CAAAGAAGAG TTCATTACCT TATGATATTG ATGGGATTGT TATTAAGGTT AATGATTTAG ATCAACAGGA TGAGATGGGA 1260 1320 TTCACACAAA AATCTCCTAG ATGGGCCATT GCTTATAAAT TTCCAGCTGA GGAAGTAGTA 1380 ACTAAATTAT TAGATATTGA ATTAAGTATT GGACGAACAG GTGTAGTCAC ACCTACTGCT 1440 ATTTTAGAAC CAGTAAAAGT AGCTGGTACA ACTGTATCAA GAGCATCTTT GCACAATGAG GATTTAATTC ATGACAGAGA TATTCGAATT GGTGATAGTG TTGTAGTGAA AAAAGCAGGT GACATCATAC CTGAAGTTGT ACGTAGTATT CCAGAACGTA GACCTGAGGA TGCTGTCACA 1500 1560 1620 TATCATATGC CAACCCATTG TCCAAGTTGT GGACATGAAT TAGTACGTAT TGAAGGCGAA 1680 GTTAGCACTT CGTTGCATTA ATCCAAAATG CCAAGCACAA CTTGTTGAAG GATTGATTCA 1740 CTTTGTATCA AGACAAGCCA TGAATATTGA TGGTTTAGGC ACTAAAATTA TTCAACAGCT TTATCAAAGC GAATTAATTA AAGATGTTGC TGATATTTTC TATTTAACAG AAGAAGATTT 1800 1860 ATTACCTTTA GACAGAATGG GGCAGAAAAA AGTTGATAAT TTATTAGCTG CCATTCAACA 1920

AGCTAAGGAC AACTCTTTAG AAAATTTATT ATTTGGTCTA GGTATTAGGC ATTTAGGTGT 1980 TAAAGCGAGC CAAGTGTKAG CAGAAAAATA TGAAACGATA GATCGATTAC TAACGGTAAC
TGAAGCGGAA TTAGTAGAAT TCATGATATA GGTGATAAAG TAGCGCAATC TGTAGTTACT
TATTTAGCAA ATGAAGATAT TCGTGCTTTA ATTCCATAGG ATTAAAAGAT AAACATGTTA 2040 2100 2160 ATATGATTTA TGAAGGTATC CAAAACATCA GATATTGAAG GACATCCTGA ATTTAGTGGT AAAACGATAG TACTGACTGG TAAGCTACAT CCAAATGACA CGCAATGAAG CATCTAAATG GCTTGCATCA CCAAGGTGCT AAAGTTACAA GTAGCGTTAC TAAAAATACA GATGTCGTTA TTGCTGGTGA AGATGCAGGT TCAAAATTAA CAAAAGCACA AAGTTTAGGT ATTGAAATTT 2280 2340 2400 GGACAGAGCA ACAATTTGTA GATAAGCAAA ATGAATTAAA TAGTTAGAGG GGTATGTCGA 2460 TGAAGCGTAC ATTAGTATTA TTGATTACAG CTATCTTTAT ACTCGCTGCT TGTGGTAACC 2520 ATAAGGATGA CCAGGCTGGA AAAGATAATC AAAAACATAA CAATAGTTCA AATCAAGTAA 2580 AAGAAATTGC AACGGATAAA AATGTACAAG GTGATAACTA TCGTACATTG TTACCATTTA 2640 AAGAAAGCCA GGCAAGAGGA CTTTTACAAG ATAACATGGC AAATAGTTAT AATGGCGGCG 2700 ACTTTGAAGA TGGTTTATTG AACTTAAGTA AAGAAGTATT TCCAACAGAT AAATATTTGT 2760 ATCAAGATGG TCAATTTTTG GACAAGAAAA CAATTAATGC CTATTTAAAT CCTAAGTATA 2820 CAAAACGTGA AATCGATAAA ATGTCTGAAA AAGATAAAAA AGACAAGAAA GCGAATGAAA 2880 ATTTAGGACT TAATCCATCA CACGAAGGTG AAACAGATCG ACCTGCAGKC ATGC 2934

## (2) INFORMATION FOR SEQ ID NO: 37:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2515 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37:

CSYCGGWACC CGGGGATCCT CTAGAGTCGA TCGTTCCAGA ACGTATTCGA ACTTATAATT ATCCACAAG CCGTGTAACA GACCATCGTA TAGGTCTAAC GCTTCAAAAA TTAGGGCAAA 120 TTATGGAAGG CCATTTAGAA GAAATTATAG ATGCACTGAC TTTATCAGAG CAGACAGATA AATTGAAAGA ACTTAATAAT GGTGAATTAT AAAGAAAAGT TAGATGAAGC AATTCATTTA 180 240 ACACAACAAA AAGGGTTTGA ACAAACACGA GCTGAATGGT TAATGTTAGA TGTATTTCAA 300 TGGACGCGTA CGGACTTTGT AGTCCACATG CATGATGATA TGCCGAAAGC GATGATTATG 360 AAGTTCGACT TAGCATTACA ACGTATGTTA TTAGGGAGAG CCTATACAGT ATATAGTTGG 420 CTTTGCCTCA TTTTATGGTA GAACGTTTGA TGTAAACTCA AATTGTTTGA TACCAAGACC 480 TGAAACTGAA GAAGTAATGT TGCATTTCTT ACAACAGTTA GAAGATGATG CAACAATCGT 540 AGATATCGGA ACGGGTAGTG GTGTACTTGC AATTACTTTG AAATGTTGAA AAGCCGGATT 600 TAAATGTTAT TGCTACTGAT ATTTCACTTG AAGCAATGAA TATGGCTCCG TAATAATGCT GAGAAGCATC AATCACAAAT ACAATTTTTA ACAGGGGATG CATTAAAGCC CTTAATTAAT 660 720 GAAGGTATCA AKTTGAACGG CTTTGATATC TAATCCMCCA TATATAGATG AAAAAGATAT 780 GGTTACGATG TCTCCMACGG TTACGARATT CGAACCACAT CAGGCATTGT TTGCAGATAA CCATGGATAT GCTATTTATG AATCAATCAT GGAAGATTA CCTCACGTTA TGGAAAAAGG 840 900 CAGCCCAGTT GTTTTTGAAA TTGGTTACAA TCAAGGTGAG GCACTTAAAT CAATAATTTT 960 AAATAAATTT CCTGACAAAA AAATCGACAT TATTAAAGAT ATAAATGGCC ACGATCGAAT 1020 CGTCTCATTT AAATGGTAAT TAGAAGTTAT GCCTTTGCTA TGATTAGTTA AGTGCATAGC 1080 TTTTTGCTTT ATATTATGAT AAATAAGAAA GGCGTGATTA AGTTGGATAC TAAAATTTGG 1140 GATGTTAGAG AATATAATGA AGATTTACAG CAATATCCTA AAATTAATGA AATAAAAGAC 1200 ATTGTTTTAA ACGGTGGTTT AATAGGTTTA CCAACTGAAA CAGTTTATGG ACTTGCAGCA AATGCGACAG ATGAAGAAGC TGTAGCTAAA ATATATGAAG CTAAAGGCCG TCCATCTGAC AATCCGCTTA TTGTTCATAT ACACAGTAAA GGTCAATTAA AAGATTTTAC ATATACTTTG 1260 1320 1380 GATCCACGCG TAGAAAAGTT AATGCAGGCA TTCTGGCCGG GCCCTATTTC GTTTATATTG 1440 CCGTTAAAGC TAGGCTATCT ATGTCGAAAA GTTTCTGGAG GTTTATCATC AGTTGCTGTT 1500 AGAATGCCAA GCCATTCTGT AGGTAGACAA TTATTACAAA TCATAAATGA ACCTCTAGCT 1560 GCTCCAAGTG CTAATTTAAG TGGTAGACCT TCACCAACAA CTTTCAATCA TGTATATCAA GATTTGAATG GCCGTATCGA TGGTATTGTT CAAGCTGAAC AAAGTGAAGA AGGATTAGAA 1680 AGTACGGTTT TAGATTGCAC ATCTTTTCCT TATAAAATTG CAAGACCTGG TTCTATAACA 1740 GCAGCAATGA TTACAGAAAT AMTTCCGAAT AGTATCGCCC ATGCTGATTA TAATGATACT 1800 GAACAGCCAA TTGCACCAGG TATGAAGTAT AAGCATTACT CAACCCAATA CACCACTTAC 1860 AATTATTACA GATATTGAGA GCAAAATTGG AAATGACGGT AAAGATTRKW MTTCTATAGC 1920 TTTTATTGTG CCGAGTAATA AGGTGGCGTT TATACCAAGT GARSCGCAAT TCATTCAATT ATGTCAGGAT GMCAATGATG TTAAACAAGC AAGTCATAAT CTTTATGATG TGTTACATTC ACTTGATGAA AATGAAAATA TTTCAGCGGC GTATATATAC GGCTTTGAGC TGAATGATAA 1980 2040 2100 TACAGAAGCA ATTATGAATC GCATGTTAAA AGCTGCAGGT AATCACATTA TTAAAGGATG 2160 TGAACTATGA AGATTTTATT CGTTTGTACA GGTAACACAT GTCGTAGCCC ATTAGCGGGA 2220 AGTATTGCAA AAGAGGTTAT GCCAAATCAT CAATTTGAAT CAAGAGGTAT ATTCGCTGTG 2280 AACAATCAAG GTGTTTCGAA TTATGTTGAA GACTTAGTTG AAGAACATCA TTTAGCTGAA 2340 ACGACCTTAT CGCAACAATT TACTGAAGCA GATTTGAAAG CAGATATTAT TTTGACGATG 2400

#### 2460 2515

# (2) INFORMATION FOR SEQ ID NO: 38:

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2635 base pairs (B) TYPE: nucleic acid

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:

		TGACTAGAGT				60
		ATAATATTAT				120
		TTTTTAGAAA				180
AAAACATCGT	TGCTTAATTT	TGTCATAGAA	CATTTAAATT	<b>AACATCATGA</b>	AATTCGTTTT	240
		TAATAATGAA				300
GTAACAGGTT	TATCTGGCGC	AGGTAAATCT	TTGGTTATTC	AATGTTTAGA	AGACATGGGA	360
TATTTTTGTG	TAGATAATCT	ACCACCAGTG	TTATTGCCTA	AATTTGTAGA	GTTGATGGAA	420
CAAGGGAAAT	CCATCCTTAA	GAAAAAGTGG	CAATTGCAAT	TGATTTAAGA	RGTAAGGAAC	480
TATTTAATTC	ATTAGTTGCA	GTAGTGGATA	AAGTTCAAAA	GTTGAAAGTG	ACGTCATCAT	540
TGATGTTATG	TTTTTAGAAG	CAAGTACTGA	AAAATTAATT	TCAAGATATA	AGGAAACGCG	600
TCCKTGCACA	TCCTTTGATG	GAACAAGGTT	AAAAGATCGT	TAATCAATGC	MATTAATGAT	660
GAGCGAGAGC	ATTTGTCTCA	AATTAGAAGT	ATAGCTAATT	TTGTTATAGA	TAACTACAAA	720
GTTATCACCT	AAAGAATTAA	AAGAACGCAT	TCGTCGATAC	TATGAAGATG	AAGAGTTTGA	780
AACTTTTACA	ATTAATGTCA	CAAGTTTCGG	TTTTAAACAT	GGGATTCAGA	TGGATGCAGA	840
TTTAGTATTT	GATGTACGAT	TTTTACCAAA	TCCATATTAT	GTAGTAGATT	TAAGACCTTT	900
AACAGGATTA	GATAAAGACG	TTTATAATTA	TGTTATGAAA	TGGAAAGAGA	CGGAGATTTT	960
TCTTTGAAAA	ATTAACTGAT	TTGTTAGATT	TTATGATACC	CGGGTWTAAA	AAAGAAGGGA	1020
AATCTCAATT	AGTAATTGCC	ATCGGTTGTA	CGGGTGGGAC	AACATCGATC	TGTAGCATTA	1080
GCAGAACGAC	TAGGTWATTA	TCTAAATGAA	GTWTTTGAAT	ATAATGTTTA	TGTGCATCAT	1140
AGGGACGCAC	ATATTGAAAG	TGGCGAGAAA	AAATGAGACA	AATAAAAGTT	GTACTTATCG	1200
GGTGGTGGCA	CTGGCTTATC	AGTTATGGCT	AGGGGATTAA	GAGAATTCCC	AATTGATATT	1260
ACGGCGATTG	TAACAGTTGC	TGATAATGGT	GGGAGTACAG	GGAAAATCAG	AGATGAAATG	1320
GATATACCAG	CACCAGGAGA	CATCAGAAAT	GTGATTGCAG	CTTTAAGTGA	TTCTGAGTCA	1380
GTTTTAAGCC	AACTTTTTCA	GTATCGCTTT	GAAGAAAATC	AAATTAGCGG	TCACTCATTA	1440
GGTAATTTAT	TAATCGCAGG	TATGACTAAT	ATTACGAATG	ATTTCGGACA	TGCCATTAAA	1500
GCATTAAGTA	AAATTTTAAA	TATTAAAGGT	AGAGTCATTC	CATCTACAAA	TACAAGTGTG	1560
CAATTAAATG	CTGTTATGGA	AGATGGAGAA	ATTGTTTTTG	GAGAAACAAA	TATTCCTAAA	1620
AAACATAAAA	AAATTGATCG	TGTGTTTTTA	GAACCTAACG	ATGTGCAACC	AATGGAAGAA	1680
GCAATCGATG	CTTTAAGGGA	AGCAGATTTA	ATCGTTCTTG	GACCAGGGTC	ATTATATACG	1740
		TTKTGAATGG				1800
GCCTAAGCTA	TATGTTTCTA	ATGTGATGAC	GCAACCTGGG	GAAACAGATG	GTTATAGCGT	1860
GAAAGATCAT	ATCGATGCGA	TTCATAGACA	AGCTGGACAA	CCGTTTATTG	ATTATGTCAT	1920
TTGTAGTACA	CAAACTTTCA	ATGCTCAAGT	TTTGAAAAAA	TATGAAGAAA	AACATTCTAA	1980
ACCAGTTGAA	GTTAATAAGG	CTGAACTKGA	AAAAGAAAGC	ATAAATGTAA	AAACATCTTC	2040
AAATTTAGTT	GAAATTTCTG	AAAATCATTT	AGTAAGACAT	AATACTAAAG	TGTTATCGAC	2100
		TAGAATTAAT				2160
ACGTAAATAA	TATAGAACGT	AATCATATTA	TGATATGATA	ATAGAGCTGT	GAAAAAAATG	2220
AAAATAGACA	GTGGTTCTAA	GGTGAATCAT	GTTTTAAATA	AGAAAGGAAT	GACTGTACGA	2280
TGAGCTTTGC	ATCAGAAATG	AAAAATGAAT	TAACTAGAAT	AGACGTCGAT	GAAATGAATG	2340
CAAAAGCAGA	GCTCAGTGCA	CTGATTCGAA	TGAATGGTGC	ACTTAGTCTT	TCAAATCAAC	2400
		ACGGAAAATG				2460
TTAAACGTGT	CTTTAATGTG	GAAGTTGAAA	TATTAGTCCG	TAAAAAAATG	AAACTTAAAA	2520
		CGTACAAAGA				2580
		TTTACGCATG				2635

#### (2) INFORMATION FOR SEQ ID NO: 39:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1952 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 39:

maas mams as					•	
TGCATGTACA	GCAGGCTCTA	CACAACCGTC		GATGCAATGT	TCGAAGATGA	60
	AATCATTCGA		TTTTAACGAA	TTGACTACTG	AAAATGAAAT	120
	GTAGCTGAAA		ATATTTTAAA	TTTAAGGAGG	AGTCATAATT	180
GTCAAATAAA		GTTGTCGTTG	GTATGTCAGG	CGGTGTAGAT	AGTTCTGTAA	240
CAGCCCACGT	CTTAAAAGAA	CAAGGTTATG	ATGTCATTGG	CATATTTATG	AAAAACTGGG	300
ATGACACTGA		GTATGTACTG	CAACTGAAGA	TTACAACGAT	GTTATTGAAG	360
	AATTGGCATT	CCGTATTACG	CTGTTAATTT	TGAAAAAGAA	TATTGGGATA	420
	GTATTTCTTA	GATGAATACA	AAAAAGGTCG	TACTCCAAAT	CCAGACGTTA	480
	AGAAATTAAG	TTTAAAGCCT	TTTTAGATCA	TGCGATGAAT	TTAGGTGCAG	540
ATTATGTAGC	AACAGGACAT	TACGCACGCA	TACATCGTCA	TGAASRTGGT	CATGTTGAAA	600
TGTTACGTGG	TGTAGATAAT	AATAAAGATC	ARACATACTK	CWKGMATGCA	AKTATCTCAA	660
CAACAACTTT	CAAAAGTGAT	GTTCCCAATT	GGCGACATCG	AAAAGAGTGA	AGTGCGTCGA	720
ATTGCTGAAG	AACAAGGACT	TGTTACTGCT	AAGAAAAAAG	ATTCTACAGG	CATTTGTTTT	780
ATCGGCGAAA	AAAACTTTAA	AACATTTTTA	TCACAATATT	TACCTGCACA	ACCGGGTGAT	840
ATGATAACAC	TTGATGGTAA	GAAAATGGGT	AAACATAGTG	GTTTGATGTA	TTACACAATA	900
GGACAAAGAC	ATGGATTAGG	TATAGGTGGG	AGATGGCGAT	CCTTGGTTTG	TTGTCGGTAA	960
AAACCTAAAA	GATAATGTTT	TATATGTWGA	ACAAGGATCC	ATCACGATGC	ATTATACAGT	1020
GATTACTTAA	TTGCTTCAGA	CTATTCATTT	GTAAATCCCA	GAAGATAATG	ACTTAGATCA	1080
AGGTTTTGAA	TGTACAGCTA	AATTTAGATA	TCGCCAAAAA	GATACGAAAG	TTTTTGTGAA	1140
ACGTGAAAAA	CGACCATGCA	CTACGTGTTA	CTTTTGCTGA	GCCAGTAAGA	GCAATCACAC	1200
	AGTTGTTTTT	TATCAAGGTG	ATGTGTTGTC	TTGGTGGTGC	AACAATTGAC	1260
GATGTKTTCA	AAAATGAAGG	TCAATTAAAT	TATGTTGTAT	ANACAATGGC	AACAATAAAT	1320
TACTTATTTG		GTTGAAAATG	ACGAAAGACA	GTTTTTGATG	AGAATAATTC	1380
ATGAGGATAG	AGTCTGGGAC	ATCACAATGT	CCTAGGCTCT	ACAATGTTAT	ATKGGCGGGA	1440
CCACAACATA	GAGAATTTCG	TAAAGAAATT	CWACAGGCAA	TGCCAGTTGG	GGATAACGAA	1500
TTTAATTTTG	TTAAAATATC	ATTTCTGTCC	CACTCCCTAT	GCATGAATCT	AATTATGTAT	1560
TCTTATTTTT	AAGTACATAA	TAGTGGTGGC	TAATGTGGAA	GAACCATTAC	ATAATAAACC	1620
GTTAATGGTT	CTTAAGCATT	TYTATTCCAT	TCCCGCTTTT	TCATGAATGA	AGATGATATT	1680
AGATTATATT	TTATTCGTTG	TTAAGTGATT	CGAGACATAC	AATTTATCAA	GATGTTTATA	1740
ATTGATGAGA		GTAAATGATA	GATCAACAAA	CAATTTATCA	ATACATACAA	1800
AATGGAAAAA		GTTACAAGCA	TTGTTCGGAA	ATATCGAAGA	AAATCCTACA	1860
	ATTATATTAA	TGCTGGTATC		ATGCGAATGA	GATTGAAAAG	1920
GCAGAGCGTT	TTTTCCAAAA	AGCTTTAACA	AT			1952

# (2) INFORMATION FOR SEQ ID NO: 40:

# (i) SEQUENCE CHARACTERISTICS:

(A) (B)	LENGTH:	2273 base pairs
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 40:

	The second secon					
TAACCAATAT	TGATAAAACC	TTGATGTGTT	TCGTGTCAAT	GACATACCAT	ATCGACTAGG	60
TACCTTTTTA	GAATGTTGAT	TAATCACAAC	AAATATCATG	GCAAGGTCAT	CTTCAAAATG	120
ATTCGATTCA	AGTGGAACGG	CATATGACGT	CTCATCACTA	TACCCTTTTT	CCCATTCTGC	180
AAATCCACCA	TAAATACTAC	GÇGACGCAGA	ACCCGAACCA	ATTCGCGCCA	ATCTCGATAA	240
ATCCTTATCT	GACAGCTGCA	TGTCTAGCGC	TTGATTACAA	GCTGCTGCTA	AAGCTGCATA	300
TGCGCTTGCC	GATGAAGCCA	ACCCTGCTGC	TGTTGGTACA	AAATTGTCGC	TTTCAATTTC	360
TGCATACCAA	TCGATGCCAG	CTCTATTTCT	GACAATATCC	ATATATTTTG	AAATTTTCTC	420
TAATTCTTTG	CCACTAACCT	TTTCACCATT	CAACCAAAAT	TGATCCTGTG	TTAACTGGTC	480
GTTAAAAGTG	ACTTTCGTTT	CAGTGTWAAA	TTTTTCTAAT	GTWACAGATA	TGCTATTATT	540
CATTGGAATG	ATTAGTGCTT	CATCTTTTTT	ACCCCAATAT	TTTATAAGTG	CAATATTCGT	600
ATGTGCACGT	GCTTTGCCAC	TTTTAATCAA	CGCATTAACC	TCCTAAATTC	TCAATCCAAG	660
TATGTGCTGC	ACCAGCTTTT	TCTACAGCTT	TTACAATATT	TTTCGCTGTT	GGTAAATCTT	720
TGGCAAGCAA	TAACATACTT	CCACCACGAC	CAGCGCCAGT	AAGTTTTCCA	GCAATCGCAC	780
CATTTTCTTT	ACCAATTTTC	ATTAATTGTT	CTATTTTATC	ATGACTAACT	GTCAACGCCT	840
TTAAATCCGC	ATGACATTCA	TTAAAAATAT	CCGCTAAGGS	TTCAAAGTTA	TGATGTTCAA	900
TCACATCACT	CGCACGTAAA	ACTAACTTAC	CGATATGTTT	TACATGTGAC	ATGTACTGAG	960
GGTCCTCACA	AAGTTTATGA	ACATCTTCTA	CTGCTTGTCT	TGTTGAACCT	TTCACACCAG	1020
TATCTATAAC	AACCATATAG	CCGTCTAAAC	TTAACGTTTT	CAACGTTTCA	GCATGACCTT	1080
TTTGGAACCA	AACTGGTTTG	CCTGATACAA	TCGTTTGCGT	ATCAATACCA	CTTGGTTTAC	1140
CATGTGCAAT	TTGCTCTGCC	CAATTAGCCT	TTTCAATGAG	TTCTTCTTTC	GTTAATGATT	1200
TCCCTAAAAA	ATCATAACTT	GCACGAACAA	AAGCAACCGC	GACAGCTGCA	CTCGATCCTA	, 1260
ATCCACGTGA	TGGTGGTAAA	TTCGTTTGGA	TCGTTACTGC	TAGCGGCTCT	GTAATATTAT	1320

CCATCGTAAA ACTTTGATTT		TAÀTAGAGGA TAAACGGTAC	ATAGTTCCCG TGCAATAGCA	CTCTCTAAGG GGCTCTCCAA	TATAAACATA TTCTATTAAA ATGTAACAGC TTGTCATGTC	1380 1440 1500 1560
AATATCACCT		TCCTAWACTT	GATTCATTAT	TTTTATTTAT	TAGTAAAAGA TTATCTCACA	1620 1680
AAAACTAACT		TCAAAGTTTA	AATCTTATCG	AGTGATATTT	CAGATTCTTT	1740 1800
TAATAATTGG	AAAATAGCCC AATATATAGA GTCATACGCA	TTTACTACTA	AAGTATTAGA	ACATTTCAAT	AGAAGGTCGT	1860 1920 1980
ATGAAATTTT TTCAATTTAA	CTTATTAAAT	TTATTATTTC AATAACATAT	CATCATATCA TTATGCTTTT	TTACTTTTAA TATGGATACT	TTTAATGATG TTCAAAAATA	2040 2100
ACAGCCCCAA TCATTYTMKW CTTGAGTAAT			CRAAATACGT		ATTTGATCKA TGCCATTCTT CAT	2160 2220 2273

## (2) INFORMATION FOR SEQ ID NO: 41:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	928 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 41:

TCCTCTAGAG	TCGATCAATA	TGAGTATTAT	TATCAAAAAA	TGCTAAATNA	GCATAACAAA	60
AGTAAAGGCG	AGTAATAATA	TGGATAAATC	ATTATTTGAA	YAGGCAAGGC	CTATATTAGA	120
ACAAATTCAA	GACAATGGTT	TTNAAGCATA	TTATGTAGGT	GGCTCTGTAA	GAGATTATGT	180
CATGGGAAGA	AATATTCATG	ATATAGATAT	CACAACAAGT	GCAACGNCGG	ATGAAATAGA	240
ATCTATCTTT	AGTCATACGA	TACCTGTAGG	TAAAGAACAT	GGCACGATAA	ATGTAGTTTT	300
TAATGATGAA	AATTATGAAG	TGACAACATT	CCGGGCTGAA	GAAGATTATG	TCGATCACCG	360
TAGACCAAGT	GGTGTTACAT	TTGTYCGTGA	TTTATACGAR	GATTTGCAAC	GACGAGATTT	420
CACGATGAAT	GCGATAGAAT	GGATACAGCA	TACAAATTGT	ATGATTATTT	TGATGGTCAA	480
CAAGATATTA	ATAATCGAWT	AATAAGAACT	GTAGGTATAG	CTGAGGAACG	TTCCAAGAAG	540
ATGCTTTACG	TATGATTCGA	TGTTTAAGGT	TCCAGTCACA	ATTATCATTT	GATATTGCAA	600
CGGAAACATT	CGAAGCGATG	CGTATACAAA	TGGCAGATAT	TAAATTTTTA	TCAATTGAGC	660
GTATAGTGAT	TGAACTAACT	AAATTAATGC	GAGGTATTAA	TGTTGAAAAG	AGTTTTAATC	720
ATTTAAAATC	GCTGAAAGCA	TTTAATTATA	TGCCGTATTT	CGAACATCTT	GATATGAATC	780
AAATTAATGT	AACTGAAGCA	ATTGATTTAG	AATTGTTGAT	TGCTATAGTA	TCAGTTAAAT	840
TTGATATTAA	TTACTCATTG	AAGCCTTTAA	AGCTAAGTTA	ACCGACAAGT	TAAAAGATAT	900
CAATCAATAT	ATTCAAATTA	TGAATGCA				928

## (2) INFORMATION FOR SEQ ID NO: 42:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	2119 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 42:

TGCATGCCTG	CAGGTCGATC	TAATATAGTT	TCCGCTAAAT	ATAATTGTTG	CGGTCGATAT	60
GTTAAGCCAR	GTYGATCTAC	AGCTTTGCTA	TATAAAGACT	TCAAGCTGCC	ATTATAATTT	120
GTTGTCGGCT	TTTTAAAATC	<b>AACTTGCTTA</b>	CGATAGATAA	TCTGTTCGAA	CTTTTCGTAC -	180
GATTTATCCA	ATGGCTTTGC	ATCATATTGC	CTAACCATCT	CAAAGAAAAT	ATCATACAAA	240
	ACTGTTTACT					300
TCAAATTTTT	CAAAAGCTAA	TATCATCAAT	TTAGCAGTAG	TAGCGGCATC	TTCGTCAGCT	360
CGATGGGCAT	TTGCTAAGGT	AATACCATGT	GCCTCTGCTA	ATTCACTTAA	TTGATAGCTT	420
	GAAAAGCTAT					480
TATTGAATAT	TACAATCTTT	AAATGCCTTT	TTAATAAAAT	TCAAATCAAA	ATCTACATTA	540
TGAGCTACAA	AAATGCAATC	TTTWATCTTA	TCGTAGATTT	CTTGTGCAAC	TTGATTAAAA	600
	GTTGTAGCAT					660
AWCTCTAAAT	TTGTTCTAAT	CATAGAATGA	TATGTATCAA	TAATTTGGTT	ATTGCGSACA	720

AACGTTATAC CAATTTGAAT GATATCGTCA AAATCTAATT GGTTGCCTGT TGTTTCCAAA TCCACAACGG CATAGGTTGC CATACCCATA GCTATCTCTC CTTGCTTTAG TGTTAAAAAT CTATATCTGC ACTAATTAAA CGGTGTGATT CACCCGCTTC ATCTCTAACA ATTAGATAGC 840 . 900 CATCGTAATC TAAATCAATT GCTTGTCCTT TAAACTGTTT ATCATTTTCT GTAAATAGCA 960 ACGTTCTATT CCAAATATTA GAAGCTGCAG TATATTCTTC ACGAATTTCA GAAAAAGGTA 1020 ACGTTAAAAA TTGATTATAT CTTTTTYCAA TTTCTTGAAG TAATATCTCT AAAAATTGAT 1080 ATCTATCTAA TTWATTTTTA TCATGTAATT GTATACTTGT TGCTCTATGT CTAATACTTY 1140 CATCAAAGTT TTCTAGTTGT TTGCGTTCAA ATTAATACCT ATACCACATA TTATTGCTTC 1200 TATACCATCC ATTATTAGCA ACCATTTCAG TTAAGAAACC ACACACTTTA CCATTATCAA 1260 TAAATATATC ATTCGGCCAT TTCACTTTGA CTTCATCTTG ACTAAAATGT TGAATCGCAT CTCTTATCCC TAATGCAATA AATAAATTAA ATTTAGATAT CATTGAGAAT GCAACGTTAG 1320 1380 GTCTTAACAC GACAGACATC CAAAGTCCTT GCCCTTTTGA AGAACTCCAA TGTCTATTAA 1440 ATCGCCCACG ACCTTTCGTT TGTTCATCAC TCAAGATAAA AAATGAAGAT TGATTTCCAA 1500 CAAGTGACTT TTTCGCAGCA AGTTGTGTAG AATCTATTGA ATCGTATACT TCACTAAAAT CAAACAAAGC AGAACTTTTT GTATATTGGT CTATTATACC TTGATACCAA ATATCTGGGA 1560 1620 GCTGTTGTAA TAAATGCCCT TTATGATTTA CTGAATCTAT TTTACATCCC TCTAACTTTA 1680 ATTGGTCAAT CACTTTTTT ACTGCAGTGC GTGGAAATAT TAAGTTGATT CCGCAATGCT 1740 TTGTCCAGAA TATATAATTC GGTTTATTTT TATAGAGTAA TTGAAGTTAC ATCTTGACTA TATTTTNACA TGATTATCCA CCCATTTCAA AATTNCAGTT TCTNCGTTGC TTACTTTACC 1800 1860 TGTNACAATC GCTATCTCAA TTTGTCTTAG CACATCTTTT AACCACGGAC CACTTTTGGC 1920 ATTTAAATGT GCCATAAGTA CACCGCCATT AACCATCATG TCTTTNCTAT TATGCATAGG 1980 TAAACGATGT AATGTTTCAT CAATCGTTTG AAGGTTAACG CTTAATGGTT CATGTCCTTG GTATCATAAC GCCTGTNTCA AGCGTTCTNC AANCATGTAC AGTTNTTCAA TGTGGNGTGT 2040 2100 CCGNATTAAC GCTATTCAA 2119

#### (2) INFORMATION FOR SEQ ID NO: 43:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 43:

TTCACAGTGT	TGTCGGGATA	CGATATAGTA	CACTGTACAG	TACGNTGGAG	ATTTATTAGA	60
TTTTCACAGA	ATTNTGAAAA	TAAGACNACG	GGTCATGGAA	ATGTTACTAT	TACCTGAAEA	120
AAGGCTAŢTA	TATAGTGATA	TGGTTGNTCG	TATTTTATTC	AATAATTCAT	TAAAATATTA	180
TATGAACGAA	CACCCAGCAG	TAACGCACAC	GACAATTCAA	CTCGTAAAAG	ACTATATTAT	240
GTCTATGCAG	CATTCTGATT	ATGTATCGCA	AAACATGTTT	GACATTATAA	ATACAGTTGA	300
ATTTATTGGT	GAGAATTGGG	ATAGAGAAAT	ATACGAATTG	TGGCGACCAA	CATTAATTCA	360
AGTGGGCATT	AATAGGCCGA	CTTATAAAAA	ATTCTTGATA	CAACTTAAAG	GGAGAAAGTT	420
TGCACATCGA	ACAAAATCAA	TGTTAAAACG	ATAACGTGTA	CATTGATGAC	CATAAACTGC	480
AATCCTATGA	TGTGACAATA	TGAGGAGGAT	AACTTAATGA	AACGTGTAAT	AACATATGGC	540
ACATATGACT	TACTTCACTA	TGGTCATATC	GAATTGCTTC	GTCGTGCAAG	AGAGATGGGC	600
GATTATTTAA	TAGTAGCATT	ATCAACAGAT	GAATTTAATC	AAATTAAACA	TAAAAAATCT	660
TATTATGATT	ATGAACAACG	AAAAATGATG	CTTGAATCAA	TACGCTATGT	CRTATTTAGT	720
CATTCCAGAA	AAGGGCTGGG	GACAAAAAGA	AGACGATGTC	GAAAAATTTG	ATGTAGATGT	780
TTTTGTTATG	GGACATGACT	GGGAAGGTGA	ATTCGACTTC	TTAAAGGATA	AATGTGAAGT	840
CATTTATTTA	AAACGTACAG	AAGGCATTTC	GACGACTAAA	ATCAAACAAG	AATTATATGG	900
TAAAGATGCT	AAATAAATTA	TATAGAACTA	TCGATACTAA	ACGATAAATT	AACTTAGGTT	960
ATTATAAAAT	AAATATAAAA	CGGACAAGTT	TCGCAGCTTT	ATAATGTGCA	ACTTGTCCGT	1020
TTTTAGTATG	TTTTATTTTC	TTTTTCTAAA	TAAACGATTG	ATTATCATAT	GAACAATAAG	1080
TGCTAATCCA	GCGACAAGGC	ATGTACCACC	AATGATAGTG	AATAATGGAT	GTTCTTCCCA	1140
CATACTTTTA	GCAACAGTAT	TTGCCTTTTG	AATAATTGGC	TGATGAACTT	CTACAGTTGG	1200
AGGTCCATAA	TCTTTATTAA	TAAATTCTÇT	TGGATAGTCC	GCGTGTACTT	TACCATCTTC	1260
GACTACAAGT	TTATAATCTT	TTTTACTAAA	ATCACTTGGT	AAAACATCGT	AAAGATCATT	1320
TTCAACATAA	TATTTCTTAC	CATTTATCCT	TTGCTCACCT	TTAGACAATA	TTTTTACATA	1380
TTTATACTGA	TCAAATGAVC	GTTCCAT			:	1407

#### (2) INFORMATION FOR SEQ ID NO: 44:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1996 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 44:

TCCTCTAGAG TCGATCGTAT TAAATTATCA AATAACGCTG AAAAGGTTAC GACGCCAGGT 60 AAGAAAATG TATATCGCAT TATAAACAAG AAAACAGGTA AGGCAGAAGG CGATTATATT ACTTTGGAAA ATGAAAATCC ATACGATGAA CAACCTTTAA AATTATTCCA TCCAGTGCAT 120 180 ACTTATAAAA TGAAATTTAT AAAATCTTTC GAAGCCATTG ATTTGCATCA TAATATTTAT 240 GAAAATGGTA AATTAGTATA TCAAATGCCA ACAGAAGATG AATCACGTGA ATATTTAGCA CTAGGATTAC AATCTATTTG GGATGAAAAT AAGCGTTTCC TGAATCCACA AGAATATCCA 300 360 GTCGATTTAA GCAAGGCATG TTGGGATAAT AAACATAAAC GTATTTTTGA AGTTGCGGAA 420 CACGTTAAGG AGATGGAAGA AGATAATGAG TAAATTACAA GACGTTATTG TACAAGAAAT 480 GAAAGTGAAA AAGCGTATCG ATAGTGCTGA AGAAATTATG GAATTAAAGC AATTTATAAA 540 AAATTATGTA CAATCACATT CATTTATAAA ATCTTTAGTG TTAGGTATTT CAGGAGGACA 600 GGATTCTACA TTAGTTGGAA AACTAGTACA AATGTCTGTT AACGAATTAC GTGAAGAAGG 660 CATTGATTGT ACGTTTATTG CAGTTAAATT ACCTTATGGA GTTCAAAAAG ATGCTGATGA 720 AGTTGAGCAA GCTTTGCGAT TCATTGAACC AGATGAAATA GTAACAGTCA ATATTAAGCC TGCAGTTGAT CAAAGTGTGC AATCATTAAA AGAAGCCGGT ATTGTTCTTA CAGATTTCCA 780 840 AAAAGGAAAT GAAAAAGCGC GTGAACGTAT GAAAGTACAA TTTTCAATTG CTTCAAACCG 900 ACAAGGTATT GTAGTAGGAA CAGATCATTC AGCTGAAAAT ATAACTGGGT TTTATACGAA GTACGGTGAT GGTGCTGCAG ATATCGCACC TATATTTGGT TTGAATAAAC GACAAGGTCG TCAATTATTA GCGTATCTTG GTGCGCCAAA GGAATTATAT GAAAAAAACGC CAACTGCTGA 960 1020 1080 TTTAGAAGAT GATAAACCAC AGCTTCCAGA TGAAGATGCA TTAGGTGTAA CTTATGAGGC 1140 GATTGATAAT TATTTAGAAG GTAAGCCAGT TACGCCAGAA GAACAAAAAG TAATTGAAAA TCATTATATA CGAAATGCAC ACAAACGTGA ACTTGCATAT ACAAGATACA CGTGGCCAAA ATCCTAATTT AATTTTTCT TCTAACGTGT GACTTAAATT AAATATGAGT TAGAATTAAT 1200 1260 1320 AACATTAAAC CACATTCAGC TAGACTACTT CAGTGTATAA ATTGAAAGTG TATGAACTAA 1380 AGTAAGTATG TTCATTTGAG AATAAATTTT TATTTATGAC AAATTCGCTA TTTATTTATG AGAGTTTTCG TACTATATTA TATTAATATG CATTCATTAA GGTTAGGTTG AAGCAGTTTG 1440 .1500 GTATTTAAAG TGTAATTGAA AGAGAGTGGG GCGCCTTATG TCATTCGTAA CAGAAAATCC 1560 ATGGTTAATG GTACTAACTA TATTTATCAT TAACGTTTGT TATGTAACGT TTTTAACGAT GCGAACAATT TTAACGTTGA AAGGTTATCG TTATATTGTT GCATCAGTTA GTTTTTAGA AGTATTAGTT TATATCGTTG GTTTAGGTTT GGTTATGTCT AATTTAGACC ATATTCAAAA 1620 1680 1740 TATTATTGCC TACGCATTTG GTTTTTCAAT AGGTATCATT GTTGGTATGA AAATAGAAGA 1800 AAAACTGGCA TTAGGTTATA CAGTTGTAAA TGTAACTTCA GCAGAATATG AGTTAGATTT ACCGAATGAA CTTCGAAATT TAGGATATGG CGTTACGCAC TATGCTGCGT TTGGTAGAGA 1860 1920 TGGTAGTCGT ATGGTGATGC AAATTTTAAC ACCAAGAAAA TATGAACGTA AATTGATGGA 1980 1996 TACGATAAAA AATTTA

#### (2) INFORMATION FOR SEQ ID NO: 45:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1017 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 45:

CTTYGARCTC GGTACCCGGG GMTCCTCTAR AGTCGATCTT TATACTCTTG TAACACATTT 60 AAGTCTTCAT CAATCATAGC ATTCGTTAAT TCAGCTCGAT GCGCTTCCAA AAATTGCTTA 120 ACATCTGGGT CATWGATGTC TCCTGATTTT ATCTTTTCTA TTCTTTTTTC AAAGTCCTGC GACGTGTTAA TTATACTTTT AAATTGCTTC ATTATTGACT GTCCTCCTCC CATTTTTTAG 180 240 ATAATTTATC TAGAAATGCT TGTCGATCTT GCTCTAATTG TTGATCATCT ACGCTATTAT 300 CTTTAGCCGA ATCTTCTTCA CTAGGTTTAT CTCTATTTTC TAACCATTTA GGTGTTTTTT 360 CTTTTGAAAT ACGATTACGC TGCCCATAGT ATGAACCACG CTTTTGGTAA TTTCCGCTAG AACCCTCATT TTTAGGTTGA TTAACTTTTT TAGCGTAATT ATATGCTTCT TTAGCTGTCT 420 480 TAATACCTTT TTTCTTCCAA TTTGATGCTA TTTCCAAAAT ATACGCTTTA GGAAGTTTCA 540 TATCTTCTTT TAACATGACA AATTGCAACA AAATATTAAT GACGCCAAAA GACATTTTTT 600 CACGTTTCAA TTAATTCTTC AACCATTGTC TTTTGCGATA TAGTTGGTYC TGATTCAGAM CAAGAAGCTA ACATATCAAT TGGACTCGTT TGTTCAAGTA ACTCAAACCA TTCATCACTT 660

TGTGGCTTTG	GATTCACTTC	TGAAGATTTG	CCCGCCGAAG	ATGATGTAGC	AGGAGATTTC	780
ACCTGTAATT	TAGGCATTTG	ATTTTCGTGT	TCCATTAAGT	AATACGAGCG	TGCTTGTTTA	840
CGCATTTCTT	CAAAGGATAA	CTGTTGTCCA	CTTGTAATTG	AATTTAAAAT	AACATGCTTC	900
ATGCCATCTG	CTGTTAAACC	ATATAAATCN	CGAATTGTGT	TATTAAACCC	TTGCATCTTG	960
GTAACAATGT	CTTGACTAAT	AAATGTTTAC	CTAACATTGT	CTCCACATTT	CNANTCC	1017

# (2) INFORMATION FOR SEQ ID NO: 46:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1035 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 46:

TATTAAAGCA GGTGCCAAAA		ATTTAATCAT AACTGGTCCT ATTAGATATA	TCAAAAGGTG	GACATGTTCA ACATTTTTAG	360 420 480
AATGGTAGTT AAAGGCGTAA TAATGCTTCA TGTACTACTA TGGGAATAGT TAATGGTTTA TTGATAATCC MCATAAAGAT CTTCTACTGG TGCGGCGAAA ACGGCATGGC ATTACGTTGT TTAGAAAAAG AAGTAACTGC GGTATCATAG AANTCGAACA CAGCTATTAT TGATGCCAAA TGGTATGAAN ATGAATGGG	ATTGCATTGG ATGACTACTG TTAAGACGTG GCTTTAAAAG ACCAACAAAG AGAAGAANTA TCACCACTAG CCACNATGTC	TTCACGCTAT CACGTTCATG AAGTATTACC AATGTATCGC AACCAAGCTT TGTCTGTTGA ATGTTCCGGG	AAAGTTTTAA TACAAATGAC TWATGAAAGC AGAATTAGAA TCGTTGATTT TTGAAAATGC TTTTAATACT AAATAAGTAA	ATAATCAGTT CAAAAAAATA ATTATTCCTA GGTAAATTAC AGTTGTTGAT AGGTTTAGAA AATCCCAATT ANTTATTGCT	480 540 600 660 720 780 840 900 960 1020

#### (2) INFORMATION FOR SEQ ID NO: 47:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 483 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:

CTCCGTTTGT	TTTCGCTTAA	AATCCCTTGC	ATCGATGCTA	ACAATTGATC	AACATCTTTA	60
AATTCTTTAT	AGACTGATGC	AAATCTAACA	TATGAAACTT	GATCAACATG	CATTAACAAG	120
TTCATAACGT	GTTCACCTAT	ATCTCGTGAA	GACACTTCCG	TATGACCTTC	ATCTCGTAAT	180
TGCCATTCAA	CCTTGTTAGT	TATGACTTCA	AGTTGTTGAT	ATCTAACTGG	TCGTTTCTCA	240
CAAGAACGCA	CAAGTCCATT	AAGTTATCTT	TTCTCTTGAA	AACTGCTCTC	TTGTGCCATC	300
TTTTTTCACA	ACTATAAGCT	GACTAACTTC	GATATGNTTC	AAATGTTAGT	GGAAACGTTG	360
TTTCCACAAT	TTTCACATTC	TCTTCGTCTT	CCGAAATGGC	ATTTAATTCA	TCGGGCATGC	420
CTTGAATCTA	CAACTTTAGA	ATTGTGTTAG	AATTACATTT	CGGGCATTTC	ATTACATCAC	480
CTC						483

#### (2) INFORMATION FOR SEQ ID NO: 48:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5718 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

CTCGGTACCC GGGGATCGTC ATGGAATACC GGAATATTAG TTTCTTTTTT CAATCGTTCT TCAATTTCAA AACAACGTGG TGCCGAAATA TCCTCTAAAT TAATACCACC ATAATTAGGT TCTAACAACT TAACTGTTTT AATGATTTCT TCGGTATCAG TTGTATTTAA CGCAATAGGC 120 180 ACCCCATTGA TACCAGCGAA GCTTTTGAAT AATACTGCTT TACCTTCCAT TACAGGAATA CTTGCTTCAG GTCCAATGTT ACCTAAACCT AATACCGCTG TTCCATCAGT AATAACTGCA 300 ACTGTATTC CTTTAATTGT GTAATCATAT ACTTTTCTTT TATCTTCATA AATATCTTTA CACGGTTCAG CAACGCCAGG TGAGTATGCT AAACTTAATT CCTCTTTATT AGTAACTTTT 360 420 ACATTTGGTT TAACTTCTAA TTTACCTTGA TTACGTTTGT GCATTTCCAA TGCTTCATCT CTTAATGACA TGAAATCAGC CCCTAATTCA ATATTTATTT TTAAAAAATA ACTTGGATAA 540 AACGCATTAC ATTATAAAAG TAAAAATATT GGGTAATCTG AATGARTAAG AATTTATGGT TTTGATTATG TAACACAAAT AGCGATAAAC GATAATAAAA TAATATTTAT AAAGATACAT TAAACCATAC TATCTAAAGA TATACCTTTA ATTATTATAA TGGATAGCAA AAACCAATAT 600 660 720 ATCAAAAAGT TATTATTTTT CCGCACGATA TATCGACAAA ATTCTTTACT CAATTTATGT 780 ATACTGCTTT TTGTGCTAAT TATTCTTATG GATTAATCAA TAATGTAAAG TGAAACTCAT 840 AAAAATAATA AGCATAAAAA ACTAATATAA ACGCAAACTG ATGGTTAAAA AATATCTAAC 900 CATCAGTTTA CTATATCATA ATTTATTAGT TGATAAAAGT TATATAAGCC TAATATCACT 960 AGGGTTAAAG GGATTGTATA AAATTATTAA ACATACTATC TTTTTGATTA ATATAGCCTA 1020 AAGTAGTCAT TTGTTTAATC GTTTCATCAT AAAAGGATAA CACAACATCA TTAGCATTCT CTTTCGTAGC TTTAATCATC TCTTCAAACA TATCTATTTG TGATTTATTT CTAATTATAA TTTGTTTGGC AAATGCTAAT TTTTGTTCTT CAAAAGTGGC TAATGTCTGA ATCTCATTTA 1080 1140 1200 TAATTAGTTG ACGTTGTTGC TTTCTATGGT CAAATTTCCC GCTAACTATA AACAAGTCAT 1260 TATGTGATAA CAACTCTTCG TACTTTTTAA ACTGATTAGG GAAAATCACA CCATCTAAAG TTTCAATGCC ATCATTTAAT GTTGACGAAT GCCATATTTT GACCATTTTT AGTTCGAATT 1320 1380 TGTTTAACTT TATCAAACTG TACTAATATA GGTTTATAAT TCTGCGCGTT ACTCAATTTA 1440 AATATCGTTA AATATTGTTT GGCAACAAAC TTTTTATCTA CTGGGTGTTG CGAAACATAA AATCCTAAAT ATTCTTTTTC GTACTGACTA ATAAGTGCAT CAGGCAATTC TTCTTTATCT 1500 1560 TCATACATCT GTTTTGGCGT TAAAATATCA AATAAAAAAC CATCTTGTTC AATGTTTAAA 1620 TCGCCATCCA ACACTTGATC AATAGCTTGC AACAACGTTG AACGTGTTTT ACCAAAAGCA TCAAACGCTC CCACTAAAAT CAGTGCTTCA AGTAACTTTC TCGTTWTGAM YCTCTTCGGT ATACGTCTAG CAWAATCAAA GAAATCTTTA AATTTGCCGT TCTGATAACG TTCATCAACA 1680 1740 1800 ATCACTTTCA CACTTTGATA ACCAACACCT TTAATTGTAC CAATTGATAA ATAAATGCCT 1860 TCTTGGGAAG GTTTATAAAA CCAATGACTT TCGTTAATGT TCGGTGGCAA TATAGTGATA
CCTTGTTTTT TTGCTTCTTC TATCATTTGA GCAGTTTTCT TCTCACTTCC AATAACATTA
CTTAAAAATAT TTGCGTAAAA ATAATTTGGA TAATGGACTT TTAAAAAGCT CATAATGTAT 1920 1980 2040 GCAATTTTAG AATAGCTGAC AGCATGTGCT CTAGGAAAAC CATAATCAGC AAATTTCAGA 2100 ATCAAATCAA ATATTTGCTT ACTAATGTCT TCGTGATAAC CATTTTGCTT TGSMCCTTCT ATAAAATGTT GACGCTCACT TTCAAGAACA GCTCTATTTT TTTTACTCAT TGCTCTTCTT AAAATATCCG CTTCACCATA ACTGAAGTTT GCAAATGTGC TCGCTATTTG CATAATTTGC 2160 2220 2280 TCTTGATAAA TAATAACACC GTAAGTATT TTTAATATAG GTTCTAAATG CGGATGTAAA TATTGAACTT TGCTTGGATC ATGTCTTCTT GTAATGTAAG TTGGAATTTC TTCCATTGGA CCTGGTCTAT ACAAAGAAGT TACAGCAACA ATATCTTCAA AGTGTTCCGG CTTTAATTTT 2340 2400 2460 TTTAATACAC TTCTTACACC GTCAGACTCT AATTGGAATA TGCCAGTCGT ATCTCCTTGC 2520 GACAACAATT CAAACACTTT TTGATCATCA AACGGAATCT TTTCGATATC AATATTAATA 2580 CCTAAATCTT TTTTGACTTG TGTTAAGATT TGATGAATAA TCGATAAGTT TCTCAACCCT AGAAAATCTA TTTTTAATAA CCCAATACGT YCGGCTTCAG TCATTGTCCA TTGCGTTAAT 2640 2700 AATCCTGTAT CCCCTTTCGT TAAAGGGGCA TATTCATATA ATGGATGGTC ATTAATAATA 2760 ATYCCTGCCG CATGTGTAGA TGTATGTCTT GGTAAACCTT CTAACTTTT ACAAATACTG AACCAGCGTT CATGTCGATG GTTTCGATGT ACAAACTCTT TAAAATCGTC AATTTGATAT GCTTCATCAA GTGTAATTCC TAATTTATGT GGGATTAAAC TTGAAAATTT CATTTAATGT 2820 2880 2940 AACTTCATCA AACCCCATAA TTCTTCCAAC ATCTCTAGCA ACTGCTCTTG CAAGCAGATG 3000 AMCGAAAGTC ACAATTCCAG ATACATGTAG CTCGCCATAT TTTTCTTGGA CGTACTGAAT GACCCTTTCT CGGCGTGTAT CTTCAAAGTC AATATCAATA TCAGGCATTG TTACACKTTC 3060 3120 TGGGTTTAAA AAACGTTCAA ATAATAGATT GAATTTAATA GGATCAATCG TTGTAATTCC 3180 CAATAAATAA CTGACCAGTG AGCCAGCTGA AGAACCACGA CCAGGACCTA CCATCACATC 3240 ATTCGTTTTC GCATAATGGA TTAAATCACT WACTATTAAG AAATAATCTT CAAAACCCAT ATTAGTAATA ACTTTATACT CATATTTCAA TCGCTCTAAA TAGACGTCAT AATTAAGTTC 3300 3360 TAATTTTTTC AATTGTGTAA CTAAGACACG CCACAAATAT TTTTTAGCTG ATTCATCATT 3420 AGGTGTCTCA TATTGAGGAA GTAGAGATTG ATGATATTTT AATTCTGCAT CACACTTTTG 3480 AGCTATAACA TCAACCTGCG TTAAATATTT CTTGGTTAAT ATCTAATTGA TTAATTTCCT TTTTCAGTTA AAAAATGTGC ACCAAAATCT TTCTTGATCA TGAATTAAGT CTAATTTTGT ATTGTCTCTA ATAGCTGCTA ATGCAGAAAT CGTATCGGCA TCTTGACGTG TTTGGTAACA 3540 3600 3660 AACATTTTGA ATCCAAACAT GTTTTCTACC TTGAATCGAA ATACTAAGGT GGTCCATATA
TGTGTCATTA TGGGTTTCAA ACACTTGTAC AATATCACGA TGTTGATCAC CGACTTTTTT
AAAAATGATA ATCATATTGT TAGAAAATCG TTTTAATAAT TCAAACGACA CATGTTCTAA 3720 3780 TGCATTCATT TTTATTTCCG ATGATAGTTG ATACAAATCT TTTAATCCAT CATTATTTTT 3900 AGCTAGAACA ACTGTTTCGA CTGTATTTAA TCCATTTGTC ACATATATTG TCATACCAAA AATCGGTTTA ATGTTATTTG CTATACATGC ATCATAAAAT TTAGGAAAAC CATACAATAC ATTGGTGTCA GTTATGGCAA GTGCATCAAC ATTTTCAGAC ACAGCAAGTC TTACGGCATC 3960 4020

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TTCTATTTTT	AAGCTTGAAT	TTAACAAATC	ATAAGCCGTA	TGAATATTTA	AATATGCCAC,	4140
CATGATTGAA	TGGCCCCTTT	CTATTAGTTA	AGTTTTGTGC	GTAAAGCTGT	AGCAAGTTGC	4200
TCAAATTCAT	CCCAGCTGTC	CAACTGAAAY	TCCTGACGCA	TTCGGATGAC	CACCGCCACC	4260
AAAATCTTGC	GCAATATCAT	TAATAATCAA	TTGCCCTTTA	GAACGTAATC	GACATCTGAT	4320
TTCATTACCT	TCATCGACTG	CAAATACCCA	TATTTTCAAG	CCTTTGATGT	CAGCAATTGT	4380
ATTAACAAAC	TGAGATGCTT	CATTTGGCTG	AATACCGAAT	TGCTCCAATA	CATCTTCAGT	4440
TATTTTAACT	KGGCAGAATC	CATCATCCAT	AAGTTCGAAA	TGTTGYAAAA	CATAACCTTG	4500
AAACGGCAAC	ATTKYTGGGT	CCTTCTCCAT	CATTTTATTT	AAAAGCGCAT	TATGATCAAT	4560
<b>ATCATGCCCA</b>	ATTAACTTTC	CAGCAATTTC	CATAGTATGT	TCWGAGGTAT	TGTTAAAAAG	4620
GRGATCGCCC	AGTATCACCG	ACGATACCAA	GATATAAAAC	GCTCGCGATA	TCTTTATTAA	4680
CAATTGCTTC	ATCATTAAAA	TGTGAGATTA	AATCGTAAAT	GATTTCACTT	GTAGATGACG	4740
CGTTCGTATT	AACTAAATTA	ATATCACCAT	ACTGATCAAC	TGCAGGATGA	TGATCTATTT	4800
TAATAAGTYT	ACGACCTGTA	CTATAACGTT	CATCGTCAAT	TCGTGGAGCA	TTGGCAGTAT	4860
CACATACAAT	TACAAGCGCA	TCTTGATATG	TTTTATCATC	AATGTTATCT	AACTCTCCAA	4920
TAAAACTTAA	TGATGATTCC	GCTTCACCCA	CTGCAAATAC	TTGCTTTTGC	GGAAATTTCT	4980
GCTGAATATA	GTATTTTAAA	CCAAGTTGTG	AACCATATGC	ATCAGGATCK	RSTYTARMRK	5040
RTCYSYGKMT	AMYRATTGYA	TCGTTGTCTT	CGATACATTT	CATAATTTCA	TTCAAAGTAC	5100
TAATCATTTT	CAWACTCCCT	TTTTTAGAAA	AGTGGCTTAA	TTTAAGCATT	AGTCTATATC	5160
AAAATATCTA	AATTATAAAA	ATTGTTACTA	CCATATTAAA	CTATTTGCCC	GTTTTAATTA	5220
TTTAGATATA	TATATTTTCA	TACTATTTAG	TTCAGGGGCC		GAAATTGGAC	5280
CCCTAATTTC	TACAAACAAT	GCAAGTTGGG		AACGTTTGTG	CGAAATCTAT	5340
CTTATGCCTA	TTTTCTCTGC	TAAGTTCCTA	TACTTCGTCA	AACATTTGGC	ATATCACGAG	5400
AGCGCTCGCT	ACTTTGTCGT	TTTGACTATG	CATGTTCACT	TCTATTTTGG	CGAAGTTTCT	5460
TCCGACGTCT	AGTATGCCAA	AGCGCACTGT	TATATGTGAT		CTGTTTTAAT	5520
ATACACGATA	TTTAAGTTCT	CTATCATGAC	ATTACCTTTT	TTAAATTTAC	GCATTTCATA	5580
TTGTATTGTT	TCTTCTATAA	TACTTACAAA	TGCCGCTTTA	CTTACTGTTC	CGTAATGATT	5640
GATTAAAAGT	GGTGAAACTT	CTACTGTAAT	TCCATCTTGA	TTCATTGTTA	TATATTTGGC	5700
GATTTGATCC	TCTAGAGT					5718

#### (2) INFORMATION FOR SEQ ID NO: 49:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 513 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 49:

TTCTTGCCTC CCAATCGCCT AATAGCCCTN AAAACTACTT TTTTTAATCT ATAGGCGATG
TAAAAAATACC ATATATTGAN GGTGCTATAC CTCCTAAAAT AGCAGTTCCC AAAGTTGTCA
TTACTGAAAT TACTGCGAAA GTATCATCCG AAAGCAATAA ATTCAAACTA ATGCATTGTT
TATTACCCAT CGAATTTATT GACCAAATAG CTAGAGAAAT AAACAACCCA AAATTTAAAA 240
TAAATGATAT AGTAATAGCA ATTGTTTACA AAACACGGAA TTTTTCATTT TTATTTATAT 300
TATCCATTTT NCTCCCTTTT NCTTAAATCA TTTTATTATA TATTNCAATA ATCAATCTGA 360
AATGTTGATG TAATTTGNNA AAAATATCAT ACTTTTNCTC CTGAAAACCT CCCTAAATCA 420
TCAATATGGN AATCNGTNTT NGGGTATTGC GNTTNCAACT CTTTTAAANC TCACTCNTTC 480
TTCTCATCGN CTTAACCGTA CTATCANTAA AAT

## (2) INFORMATION FOR SEQ ID NO: 50:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 533 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 50:

CTGAGCTGCT TNCANNNCCA NTNTGAAAAA GCCCCCAGNN CAGCCCGNTT NCAAAACAAC 60
GNCTNCATTT GAANCCCCAT GAAAAAGAAC GAATTTTGAC AATGGNTTAA AAAACAAC 120
AGATAATAAG AAAAAGTGCC GTCAACTGCA TATAGTAAAA GTTGGCTAGC AATTGTATGT 180
NCTATGATGG TGGTATTTC AATCATGCTA TTCTTATTTG TAAAGCGAAA TAAAAAGAAA 240
AATAAAAACG AATCACAGCG ACGNTAATCC GTGTGTGAAT TCGTTTTTT TATTATGGAA 300
GTAATTGGAA TATAACGNCA AATCCGTTTT GTAACATATG GGTAATAATT GGGAACAGCA 420

AGCCGTTTTG TCCAAACCAT ATGCTAATGN AAAAATGNCA CCCAT GATAAATTTG GNATCCATTA TGTGCCTAAT GCAAATNCCT NATGA	ACCAA AATAAACTGG 480 CCTTC CTT 533
(2) INFORMATION FOR SEQ ID NO: 51:	
(i) SEQUENCE CHARACTERISTICS:	
(A) LENGTH: 568 base pai (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:	-
CCGACAGTCG TTCCCNTCAT GCAAAATATG GGGGCTAAAC TCAGT ATAAGACAAA TGAAATTGCC TGGTGACGGT AGNACAACTG CAACA ATGATTCAAG AAGCAGTTAA AGTGGTGCGA ACCCA GGTATCGACA AAGCAGTTAA AGTGGTGCGA ACCCA GAAAATAAAA ATGAAATTNC GCAAGTAGGT GCGNTTTCAG CAGCA CGTTATATTT CTGAAGCTAT NGGNAAAGTA GGTAACGNTG GTGTC CANTCACCNN CTATNGTTAC TGCTTCNGCT AAAATGGTTG CTGCN ATTTTTGTNA CNGCTTNGGG ANTCTCGTCT TTNCNCGATT CTTTC GGGNAATCTT TTNGGNCNCC CTTTTATTT	GTATT AGCTCAAGCA 120 GTTGG TTTACGACAA 180 AATTC TCAAAAAGTT 240 GATGN AGNAATTNGA 300 ATTAC ANTTNTNGGG 360 TTTGA TCNNNGTTAT 420 TTTGG NCGCCCCTAC 480
(2) INFORMATION FOR SEQ ID NO: 52:	
(i) SEQUENCE CHARACTERISTICS:	
(A) LENGTH: 437 base pai (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:	•
CAAYTTAGYC AACTACTACC AATATAGCAC TAGAACTGGA AATGA CACTTTTTSA TTGKTTAAAC ATGTACATAT TTNAAAAAAT AGGAC TGATATAGTT ATTTSAGAG TAATCCTAGG AACTATTGTA TTTAT TTTAAAATGT CATTCATTAT ACATAAGCAT TTTGATATAG AATTT TGAAAACAGG TTAAGACCAT TTTTTTGTCTC AACCTGTTTT ATTTA TTCATCAATT TCTTTGTATA TTTTTYCTAA TGCAACTTTA GCATC ATCATTTTYC TTAAGTGCCG CTTTAGCTCT ATATTCATTC ATYAT	AGCAA AGKAAATAAT 120 ATTTS TCTCCCCTAC 180 ATCAC ATATGCAAAT 240 TTATC TATTTMTAAT 300 AGCCA TTGATACGAA 360
(2) INFORMATION FOR SEQ ID NO: 53:	
(i) SEQUENCE CHARACTERISTICS:	
(A) LENGTH: 659 base pair (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:	
CCCGATTCGA GCTCGGTACC GGNGATCCTC TAGAGTCGAT CTATC AAATGGACAT TAATGATATT AATATCGACA ATTTCCAATC TGTCT ATTTGAATTT AGTAATCTA CCAACGTTAA TCATTAGCTG GGTCT GAATGAGAAG TTACAAATAA AATCTATGAG ATTATACCTN CAGAC GTGTCTTTTN TGTTGTGTGG TTTTATTTNT GAAATNCGAA AAAGT GTGACTAGTG TATAAGTGCT GATGAGTCAC AAGATAGATA GCTAT TAAAAGTGTTT ATAGNTAATT AATAATTAGT TAATTTCAAA AGTTC TAAATAAATG TAAGATAATA ATTTGGAGGA TAATTAACAT GAAAA AATCTTNATT AACATTAGGG GCAATAGGTA TTACTACAAC TACAA ATGCGAGCGA AGGATACGGT CCAAGAGAAA AGAAACCAGT GAGTA NAGAGTACAA TGATGGTACT TTTAATATCA ATCTTGANCA AAAT	TTTTT GACGTGTCTA 120 ACAATA TTTAACTATA 180 ACCAA CATTCAAATG 240 AGAGG CATGAATTTT 300 ATTATT GTCTATATTA 360 ATTAAA ATAGGATAAC 420 AATAAA TTGATAGCAA 480 ATTGCG TCAACAGCAG 540 ATTAAT CACAATATCG 600

- INFORMATION FOR SEQ ID NO: 54: (2)
  - SEQUENCE CHARACTERISTICS:

298 base pairs LENGTH: (A) (B) TYPE: nucleic acid (C) single

STRANDEDNESS: (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

AATNCTCCTC	CNATGNTTTA	TNATGAAACT	AACTTTAAGT	NAAATATTTN	TCCAGACTAC	60
TTGCATCTCC	NTTATNCCCT	TCTATAGTTN	CTATCCCAGT	TNATGATAAA	AGTAATGCTA	120
	NAATATATAT					180
TACTGAGTAT	ATAGTCAATT	TNNGGACAAT	TACATTAACC	TGTCATTAAA	TNGATTACTT	240
TTTNNATTAA	CAAAAATTAA	CATAACATTT	AATTAATTNT	TTCCNGATAN	CAGCAACG	298

- INFORMATION FOR SEQ ID NO: 55: (2)
  - SEQUENCE CHARACTERISTICS:

535 base pairs (A) LENGTH: (B) TYPE: nucleic acid STRANDEDNESS: single (C) TOPOLOGY: linear

SEQUENCE DESCRIPTION: SEQ ID NO: 55:

TCCAAATATT C	CACCAAGCTG	TAGTTCAAGA	TGATAACCCT	NATTTTAANT	CTGGCGAAAT	60
CACTCAAGAN C	TACAAAAAG	GATACAAGCT	TAAAGATAGA	GTATTAAGAC	CATCANTGGT	. 120
CAAAGTAAAC C	CAATAACTTA	AATTTGGCGA	AAAGACATTG	TTTAAAATTA	ANTTAATTTA	180
ATGATTAATT G	GAGGNATTT	TNTTATGAGT	AAAATTNTTG	GTATAGACTT	AGGTACAACA	240
NATTCATGTG T	TAACAGTATT	AGANGGCGAT	GAGCCAAAAG	TAATTCAAAA	CCCTGANGGT	300
TCACGTACAA C						360
GCAAAACGTC A	AGCTATTAC	AAACCCAAAC	ACTGTTCANT	CTATTAGNCG	TCATATGGGT	420
ACTGNTTATA A	NGTAGATAT	TGAGGGTAAA	TCATACACAC	CACAAGNNNT	CTCAGCTNTG	480
NTTTTNCAAA A	ACTTANNANT	TNCAGCTGNA	GTNATTTAGG	TGNGNNNGTT	GNCAA	535

- INFORMATION FOR SEQ ID NO: 56: (2)
  - SEQUENCE CHARACTERISTICS:

540 base pairs (A) LENGTH: (B) TYPE: nucleic acid

STRANDEDNESS: single (C) (D) TOPOLOGY: linear

SEQUENCE DESCRIPTION: SEQ ID NO: 56:

ATGACTGCAG	GTCGATCCAT	GATTTACAAG	TATATTGGTA	GCCAATTCTA	CTGCTTCATG	60
ATTAATAATA	ATTGAAAGCT	CTGTCCAGTT	CATACTTTAT	TCTCCCTTAA	AGAATCTTTT	120
TGNTCTATCT	TTAAAATTCG	AAGGTTGTTC	ATTAATTTCT	TCACCATTTA	ATTGGGCAAA	180
TTCTTTCATT	AGTTCTTTNT	GTCTATCTGT	TAATTTAGTA	GGCGTTACTA	CTTTAATATC	240
AACATATAAA	TCTCCGTATC	CATAGCCATG	AACATTTTTT	ATACCCTTTT	CTTTTAAGCG	300
GAATTGCTTA	CCTGTTTGTG	TACCAGCAGG	GGATTGTTAA	CATAACTTCA	TTATTTAATG	360
TTGGTATTTT	TATTTCATCG	CCTAAAGCTG	CTTGTGGGAA	GCTAACATTT	AATTTGNAAT	420
AAATATCATC	ACCATCACGT	TTAAATGTTT	CAGATGGTTT	AACTCTAAAT	ACTACGTATT	480
		TTCACGGCTG				540

- INFORMATION FOR SEQ ID NO: 57:
  - SEQUENCE CHARACTERISTICS:

(A) LENGTH: 536 base pairs nucleic acid (B) TYPE:

(C) STRANDEDNESS: single linear (D) TOPOLOGY:

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# (xi) SEQUENCE DESCRİPTION: SEQ ID NO: 57:

TTTATAATTT	CATCTNTTGA	AGCATCCTTA	CTAATGCCTA	AAACTTCATA	ATAATCTCTT	60
TTGGCCACAG	CTATCTCTCC	TTTNCTNAAT	TAACTCATAT	AGTTTAACGT	AATATGTCAT	120
ACTATCCAAA	TAAAAAGCCA	AAGCCAATGT	NCTATTGACT	TTNACTTTTC	ANATCATGAC	180
AACATTCTAA	TTGTATTGTT	TAATTATTTT	NTGTCGTCGT	CTTTNACTTC	TTTAAATTCA	240
GCATCTTCTA	CAGTACTATC	ATTGTTTTNA	CCAGCATTAG	CACCTTGTNT	TGTTGTTGCT	300
GTTGAGCCGC	TTGCTCATAT	ACTTTTNCTG	NTAATTCTTG	ANTCACTTTT	TCAAGTTCTT	360
CTTTTTTAGA	TTTANTATCT	TCTATATNCT	TGACCTTTCT	AANGCAGTTT	TAAGAGCGTC	420
TTTTTTCCTC	TTTCTGCAGT	TTTNTTATAC	TTCCTTTCAC	CGTNATTTTT	CGGCTTATTT	480
CAGTTAAANG	TTTTTCCANC	TTGGGTNTAN	CTATGGCTAG	NAAAGNTTCG	NTTCCT	536

## (2) INFORMATION FOR SEQ ID NO: 58:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	536 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY	linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 58:

		CGTTTNAAAG ATCTCATTAC				60 120
TACACTTAGA	AGTAAACTTA	ACTCGTNCTA	AATTTGAAGA	ATTATCAGAT	TCATTAATTA	180
GAAGANCAAT	GGAACCTACA	CGCCAAGCAA	TGAAAGACGC	TGGCTTAACA	AACTCAGATA	240
TCGATGAAGT	TATCTTAGTT	GGTGGNTCAA	CTCGTATTCC	AGCAGTACAA	GANGCTGTCA	300
AAAAAGAAAT	CGGTAAAGAG	CCTAACAAAG	GAGTAAACCC	GGNCGAAGTA	GGTGGCAATG	360
GGNGCTGCAA	TCCAAGGTGG	CGTTATTCAC	AGGTGACGTT	TAAAGACGTG	TATTATTAGG	420
NCGTAACACC	ACTATCTTTA	GGTATTGAAA	TTTTAGGTGG	NCGTATGNAT	TACGGTAATT	480
GAACGTAACA	CTACGGTTCC	TNCATTCTAA	NTCTCAAAAT	CTNTTCAACA	GCAGTT	536

# (2) INFORMATION FOR SEQ ID NO: 59:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	925 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D).	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

CTAGAGTCGA	TCTAAAGAAT	ATNTAANTCC	TNATATKSCT	GATGTTGTAA	AAGAAGTGGA	60
TGTTGAAAAT	AAAAAATTA	TCATCACGCC	AATGGAAGGA	TTGTTGGATT	AATGAAAATT	. 120
GATTATTTAA	CTTTATTTCC	TGAAATGTTT	GATGGTGTTT	TAAATCATTC	AATTATGAAA	180
CGTGCCCANG	AAAACAATAA	ATTACAAATC	AATACGGTTA	ATTTTAGAGA	TTATGCAATT	240
AACAAGCACA	ACCAAGTAGA	TGATTATCCG	TATGGTGGCG	GWCAAGGTAT	GGTGTTAAAG	300
CCTGACCCTG	TTTTTAATGC	GATGGAAGAC	TTAGATGTCA	CAGAMCAAAC	ACGCGTTATT	360
TTAATGTGTC	CACAAGGCGA	GCCATTTTCA	CATCAGAAAG	CTGTTGATTT	AAGCAAGGCC	420
GACCACATCG		CGGACATTAT				480
CTTGTCACAG	RTGAAATATC	AATGGGTGAC	TATGTTTTAA	CTGGTGGAGA	ATTGCCAGCG	540
ATGACCATGA	CTGATGCTAT	TGTTAGACTG	ATTCCAGGTG	TTTTAGGTAA	TGNACAGTCA	600
CATCAAGACG	ATTCATTTTC	AGATGGGTTA	TTAGAGTTTC			660
GAATTTAAGG	GTCTAACAGT	TCCAGATGTT	TTATTGTCTG	GAAATCATGC	CAATATTGAT	720
GCATGGAGAC	ATGAGCAAAA	GTTGAACCGC	ACATATAATN	AAAGACCTGA	CTTAATTNNA	780
AAATACCCAT	TAANCCAATG	GCAGCATAAG	GCAAATCATT			840
AGGTATTNGT	AAAAAGGTTN	AGTGATTGTG	NNNAACNNAN	TNGNATGTGG	CAAACATNCN	900
AANTACATCC	TGGAAGGACC	TCACG				925

# (2) INFORMATION FOR SEQ ID NO: 60:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2531 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 60:

					•	
	CAACATAATA			CTATTAATTC	TCCACGAAAC	60
TGTTATCTT	TCGTTTTCTG		GTGTTTTTTG	GGTGATTTAA	TTACTTGTTC	120
CGTTGAACAT	TTACAAGGCC	TTTTTTAAGT	TAACTGTTTG	ACCTCATTAC	GTGTACCGAC	180
GCCCATATTT	GCTAAAAATT	TATCTATTCT	CATCGTAAAA	ACCTAACTCT	ACGTCTTAAT	240
TTTTCAGGAA	TTTCACCTAA	GAATTCGTCC	GCAAGACGCG	TTTTAATTGT	GAWTGTACCG	300
TAAATTAGAA	TACCTACTGT	AACACCTAAA	ATAATAATGA	TTAAGTWACC	AAGTTTTAGT	360
AGGTYCTAAF	AATARATTTG	CAAGGNAAAA	TACTAATTCT	ACACCTAGCA	TCATAATNNT	420
GNATACAAGO	ATATWTWTGC	AAAATGGATC	CCAACTATAG	CTGAATTTAA	ACTTCGCATA	480
TWTTTTAAGF	ATWTAGRAAT	TACATCCMAT	TGCAAATAAT	TAATGCGATA	CTAGTACGTA	540
AAATTGCACC	AGGTGTATGG	AATAACATAA		GTTTAACGCT		600
CTACAGAAGO	TAAAATAACA	TAAACTGTTA	ATTTCTGTTT	ATCTATACCT	TGTAANATNG	660
ATGCCGTTAC	ACTTAATAGT	GAAATYAGTA	TTGCTACAGG	CGCATAATAK	AATAATAAGC	720
	ATGGTTAGGG			ATCGTAACCA	TAGATAAACT	780
					CAGTTATAAA	840
CATTWAGTTA	CACCAATTAG	ATGTTCCTAA	TTTGATGATG	CATTTCATGT		900
CTGCAAATGT		TAAGGAATTA				960
TCGGAATCAT		TTAGTTGACA		ATTAAAGAAT		1020
ACTGTGAAGG	TATACCAACT		CACCGTTATG		TCTACTAAGT	1080
	ATAATTCAAA				AATAATTTCT	1140
TTATACATCT	TGCCATATGA	CACATCTATA	TCTGTGTAAT	CAGATTCGAC	CATACGATCA	1200
ATATTATGCT		CCAGTAATAC	CAGAGTGTGR		AATCGCACCA	1260
ACTGCTGCTC	CAAAAGTAGC	AATACCATTG	GCTAATAAAA		AAAGACATTT	1320
AGTACTAAAT	' AACTTCCGAT	TAATATGAAA	ATCACGCGTG		AGTTACTTCT	1380
GACACTGCTG	TTGGCCCCAT	AGATTTATAA	CCTTGGAATA	TCCCTCTCCA	TGTCGCTAAT	1440
ACAGGAATAA	AGATAACAAC	CATACTAATG	ATTCTTATAA		TATCATCCGA	1500
CTGACCAACC	GTTTTTATCA	TGAATGTTTC	TAGCTAATGT	TAATTCAGAA	ATATAAGGTG	1560
YTAAGAAATA	CAGTACCAAG	AAACCTAAAA	CACCGGTAAT	ACTCATTACA		1620
ATTTATAAAA	WTTCTGACTT	WACTTTAWAT	GCCCCAATAG		CGCAACATAT	1680
TTCGAAGCTC	CTAATGGTAC	ACCTGCTGTC	GCCAACTGCA	ATTGCAATAT	TATATGGTGC	1740
ATAAGCGTWI	GTTGAACGGS	GCCATATTTT	CTTGTCCCNC	CAATTAAATA	GTTGAATGGA	1800
ATGATAAAAA	GTACGCCCAA	TACCTTGGTA	ATTAATATAC	TAATGGTAAT	TAAAAAGGTT	1860
CCACGCACCA		TTCACTCATT	ACGAATCTCC	CTATCTCATG	TTTATTAAAG	1920
TTTTGTAAAC	TAAAAGCTGT	TTCTCTGTAA	AATCATTTTT	CATTATTATG	AATATATCAC	1980
AAAACTTTAT	TTCATYGTCG	TATATTTCAA	TGGAATTATC	CATAACAAAA	TTATCAACAC	2040
ATTGTCATTG	AATACTAGAT	TTTGATTAGA	ATATTACGAA	ATTTCATATA	AACATTATAC	2100
TACTATTTGA	GATGAACATC	GCATAACAGT	AGAAAAATCA	TTCTTATCAT	ACACATACAT	2160
CTTCATTTTT		ACATTATAAA		ATAATTGTCA	TCTCATAACA	2220
CAAGAGATAT	AGCAAAGTTT	AAAAAAGTAC	TATAAAATAG	CAATTGAATG	TCCAGTAACA	2280
	AAGCGTATAT			GAGGCGGACC	TAGCGGCTTA	2340
ATGGCGGCAG	TAGCWGCAAG	CGAACAAAGT	AGCAGTGTGT	TACTCATTGA	AAAAAAGAAA	2400
GGTCTAGGTC	GTAAACTCAA				TAATCGAYTA	2460
	AAATTATTCA					2520
CCTTTTCAAT						2531

# (2) INFORMATION FOR SEQ ID NO: 61;

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 888 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 61:

TCGAGCTCGG	TACCCGGGGA	TCCTCTAGAG	TCGATCTACA	GAGCTGTTTA	ACGTTTGTAC	60
TGAGTCACCG	ATACCTTTAA	CAGCATCTAC	AACTGAGTTT	AAACGATCTA	CTTTACCTTG	120
GATATCCTCA	GTTAAACGGT	TTACTTTATG	AAGTAAATCT	GTTGTTTCAC	GAGTAATACC	180

TTGAACTTGA	CCTTCTACAC	CGTCAAGTGT	TTTTGCAACA	TAATCTAAGT	TTTTCTTAAC,	240
AGAATTTAAT	ACAGCTACGA	TACCGATACA	TAAAATTAAG	AATGCAATCG	CAGCGATAAT	300
TCCAGCAATT	GGTAAAATCC	AATCCATTAA	AAACGCCTCC	TAATTAACAT	GTAATAATGT	360
CATTAATAAT	AAATACCCAT	ACTACTCTAT	TATAAACATA	TTAAAACGCA	TTTTTCATGC	420
CTAATTTATC	TAAATATGCA	TTTTGTAATT	TTTGAATATC	ACCTGCACCC	ATAAATGAAA	480
ATAACAGCAT	TATCAAATTG	TTCTAATACA	TTAATAGAAT	CTTCATTAAT	TAACGATGCA	540
CCTTCAATTT	TATCAATTAA	ATCTTGTWTC	GTTAATGCGC	CAGTATTTTC	TCTAATTGAT	600
CCAAAAATTT	CACAATAAGA	AATACACGAT	CTGCTTTACT	TAAACTTTCT	GCAAATTCAT	660
TTAAAAATGC	CTGTGTTCTA	GAGAAAGTGT	GTGGTTTGAN	ATACTGCAAC	AACTTCTTTA	720
TGTGGATATT	TCTTTCGTGC	GGTTTCAATT	GNNGCACTAA	NTTCTCTTGG	ATGGTGTNCA	780
TAATCAGCTA	CATTAACTTG	ATTTGCGATT	GTAGTNTCAT	NGANNGACGT	TTAACNCCAC	840
CAACGTTTCT	AATGCTTCTT	TAANATTGGG	ACATCTAACT	TCTCTAAA		888

#### (2) INFORMATION FOR SEQ ID NO: 62:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 902 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 62:

GCATGCCTGC AGGTCGATCC AAAAATGGTT GAATTAGCTC CTTATAATGG TTTGCCMMMT 60 TTRGTTGCCA CCGKTAATTA CAGATGTCMA AGCCAGCTAC ACAGAGTTTG AAAAKGGSCC 120 STWGAAAGGA AATGGAACGA ACGTKATAAG TTATTTGCCA CATTACCATG TACGTAATAT 180 AACAGCCATT TAACAAAAAA GCCACCATAT GATGAAAGAW TGCCAAAAAT TGTCATTGTA 240 ATTGATGAGT TGGCTGATTT AATGATGATG GCTCCGCAAG AAGTTGAACA GTCTATTGCT 300 AGAATTGCTC AAAAAGCGAG AGCATGTGGT ATTCATATGT TAGTAGCTAC GCAAAGACCA TCTGTCAATG TAATTACAGG TTTAATTAAA GCCAACATAC CAACAAGAAT TGCATTTATG 360 420 GTATCATCAA GTGTAGATTC GAGAACGATA TTAGACAGTG GTGGAGCAGA ACGCTTGTTA 480 GGATATGGCG ATATGTTATA TCTTGGTAGC GGTATGAATA AACCGATTAG AGTTCAAGGT 540 ACATTTGTTT CTGATGACGA AATTGATGAT GTTGTTGATT TTATCAAACA ACAAAGAGAA CCGGACTATC TATTTGAAGA AAAAAGAAAT TGTTGAAAAA AACACAAACA CMATCMCMAG 600 660 ATGAATTATT TGATGATGTT TGTGCATTTA TGGTTAATGA AGGACATATT TCAACATCAT 720 TAATCCAAAG ACATTTCCAA ATTGGCTATA ATAGAGCAGC AAGAATTATC GATCAATTAG 780 AAGCAACTCG GTTATGTTTC GAGTGCTAAT NGGTTCAAAA ACCNAGGGAT GTTTATGTTA 840 CGGAAGCCGA TTTTAAATAA AGAATAATTT ATGATTAAGG ATTTTTATAT AATGGACACC 900 902

## (2) INFORMATION FOR SEQ ID NO: 63:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3592 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 63:

GATCCTTATT CTGAATATTT AACAAAWGCA ACAAACGAAA TCCCTTTGAA TGAAAGGTGT TTCAGGTGCA TTTTKTAGGT ATTGGTGCAG AAAATGCAAA AGAAAAATGA ATCAAATTAT 120 GGTTACTAGT CCTATGAAGG GWTCTCCAGC AGAACGTGCT GGCATTCGTC CTAAAGATGT CATTACTAAA GTAAATGGAA AATCAATTAA AGGTAAAGCA TTAGATGAAG TTGTCAAAGA 180 240 TGTTCGTGGT AAAGAAAACA CTGAAGTCAC TTTAACTGTT CAACGAGGTA GTGAAGAAAA 300 AGACGTTAAG ATTAAACGTG RAAAAATTCA TGTTAAAAGT GTTGAGTATW AGRAAAAAGG 360 TAAAGTTGGA GTTATTACTA TTAATAAATT CCAGAMTGAT ACATCCAGGT GRATTGAAAG ATGCAGTTCT AAAAGCTCAC CAAAGATGGT TTGWAAAAGA TTGTTTTAGA TTTAAGAAAT 420 480 AATCCAGGTG GACTACTAGA TGAAGCTGTT AAAATGGCAA ATATTTTTAT CGATAAAGGA 540 AAAACTGTTG TTAAACTARA AAAAGGTAAA GATACTGAAG CAATTCNNAC TTCTAATGAT GCGTTAAAAG AAGCGAAAGA CATGGATATA TCCATCTTAG TGAATGAAGG TTCNGCTNGC GCTTCTGAAG TGTTTACTGG TGCGCTAAAA GACTNTAATA AAGCTAAAGT TTATGGGTCA 600 660 720 AAAACATTCG GCAAAGGTGT CGTACAAACT ACAAGAGAGT TTAAGGGATG GTTCATTGTT 780 AAAATATACT GAAATGGAAA TGGTTAACGC CAGATGGTCA TTATATTCAC NGTACAAGGC ATNAAACCAG ACGTTACTNT TTGACACACC TGAAATANCA ATCTTTTAAA TGTCATTCCT AATACGANAA CATTTAAAGT TNGGAGACGA TGAATCTAAA ATATTAAAAC TATTAAAAWT 840 900

GGTTTATCAG CTTTAGGTTA TAAAGTTGAT AAATGGAATC AACGCCAATT TGGATAAAGC TTTAGAAAAT CAAGTTAAAG CTTYCCAMCA AGCGAATAAA CTTGAGGTAM YKGGKGAWTT TAATAAAGAA ACGAATAATA AATTTACTGA GTTATTAGTT GAAAAAGCTA ATAAACATGA 1140 TGATGTTCTC GATAAGTTGA TTAATATTTT AAAATAAGCG ATACACACTA CTAAAATTGT ATTATTATTA TGTTAATGAC ACGCCTCCTA AATTTGCAAA GATAGCAATT TAGGAGGCGT GTTTATTTTT ATTGACGTCT AACTCTAAAA GATATAAATT AGACATTTAC AAATGATGTA AATAACGCAA TTTCTATCAT CGCTGATAAC AATTCATGGT TTAATATGCA ATGAGCATAT 1380 ACTITITAAA TAGTATTATT CACTAGTTTT AACAATCAAT TAATTGGTAT ATGATACTTT
TATTGGTTAT TTTTATCCCA TAGTGTGATA AWTACTATTT TTCATTCAYA ATAAAGGTTT
AAAGCATGTT AATAGTGTGT TAAGATTAAC ATGTACTGAA AAACATGTTT WACAATAATG 1500 AATATAAGGA KTGACGTTAC ATGAWCCGTC CTAGGTAAAA TGTCMGAWTT AGATCAAATC 1620 TTAAATCTAG TAGAAGAAGC AAAAGAATTA ATGAAAGAAC ACGACAACGA GCAATGGGAC GATCAGTACC CACTTTTAGA ACATTTTGAA GAAGATATTG CTAAAGATTA TTTGTACGTA 1680 1740 TTAGAGGAAA ATGACAAAAT TTATGGCTTT ATTGTTGTCG ACCAAGACCA AGCAGAATGG TATGATGACA TTGACTGGCC AGTAAATAGA GAAGGCGCCT TTGTTATTCA TCGATTAACT 1860 GGTTCGAAAG AATATAAAGG AGCTGCTACA GAATTATTCA ATTATGTTAT TGATGTAGTT AAAGCACGTG GTGCAGAAGT TATTTTAACG GACACCTTTG CGTTAAACAA ACCTGCACAA GGTTTATTTG CCAAATTTGG ATTCATAAG GTCGGTGAAC AATTAATGGA ATATCCGCCM 1920 2040 TATGATAAAG GTGAACCATT TTATGCATAT TATAAAAATT TAAAAGAATA GAGGTAATAT 2100 TAATGACGAA AATCGCATTT ACCGGAGGGG GAACAGTTGG ACACGTATCA GTAAATTTWA RTTTAATTCC AACTGCATTA TCACAAGGTT ATGGARGCGC TTTATATTGG TTCTAAAAAT 2160 2220 GTATTGAAA GAGAGAATGA TTGAWTCACC AACTACCCRG AAATTAAGTA TTATCCTATT
TCGGAGTGKT AAATTAAGAA GATATATTC TTTAGAAAAT GCCAAAGACG TATTTAAAGT
ATTGAAAGGT ATTCTTGATG CTCGTAAAGT TTTGAAAAAA GAAAAACCTG ATCTATTATT
TTCAAAAGGT GGATTTGTAT CTGTGCCTGT TGTTATTGCA GCCAAATCAT TAAATATACC
AACTATTATT CATGAATCTG ACTTAACACC AGGATTAGCG AATAAGATAG CACTTAAATT 2280 2400 2520 TGCCAAGAAA ATATATACAA CATTTGAAGA AACGCTAAAC TACTTACCTA AAGAGAAAGC TGATTTATT GGAGCAACAA TTCGAGAAGA TTTAAAAAAT GGTAATGCAC ATAATGGTTA TCAATTAACA GGCTTWATG RAAATAAAAA AGTTTTACTC GTYATGGGTG GAAGCTTWGG 2640 2700 AAGTAAAAA TTAAATAGCA TTATTCGCGA AAACTTAGAT GCATTTATTA CAACAATATC 2760 AAGTGATACA TTTAACTGGT AAAGGATTAA AAGATGCTCA AGTTAAAAAA TCAGGATATA 2820 TACAATATGA ATTTGTTAAA GNGGATTTAA CAGATTTATT AGCAATTACG GATACAGTAA 2880
TAAGTAGAGC TGGATCAAAT GCGATTTATG GAGTTCTTAA CATTACGTNT ACCAATGTTA 2940 TAAGTAGAGC TGGATCAAAT GCGATTATG GAGTTCTTAA CATTACCATTA ACAATCATTAT
TTAGTACCAT TAGGTTTAGA TCAATCCCGA GGCGACCAAA TTGACANTGC AAATCATTTT
GCTGATAAAG GATATGCTAA AGCGATTGAT GAAGAACAAT TAACAGCACA AATTTTATTA
CAAGAACTAA ATGAAATGGA ACAGGAAAGA ACTCGAATTA TCAATAATAT GAAATCGTAT 3060 GAACAAAGTT ATACGAAAGA AGCTTTATTT GATAAGATGA TTAAAGACGC ATTGAATTAA 3180 TGGGGGTAA TGCTTTATGA GTCAATGGAA ACGTATCTCT TTGCTCATCG TTTTTACATT
GGTTTTTGGA ATTATCGCGT TTTTCCACGA ATCAAGACTT GGGAAATGGA TTGATAATGA
AGTTTATGAG TTTGTATATT CATCAGAGAG CTTTATTACG ACATCTATCA TGCTTGGGGC 3240 3300 3360 TACTAAAGTA GGTGAAGTCT GGGCAATGTT ATGTATTTCA TTACTTCTTG TGGCATATCT 3420 CATGTTAAAG CGCCACAAAA TTGAAGCATT ATTTTTTGCA TTAACAATGG CATTATCTGG AATTTTGAAT CCAGCATTAA AAAATATATT CGATAGAGAA AGGACCTGAC ATTGCTGGCG 3480 TTTGAATTGG ATGATTAACA GGRTTTAGTT TTCCTGAGCG GTCATGCTAT GG

# (2) INFORMATION FOR SEQ ID NO: 64:

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2573 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 64:

ATTCGAGCTC GGTACCCGKG GATCCTSYAG AGTCGATCCG CTTGAAACGC CAGGCACTGG TACTAGAGTT TTGGGTGGTC TTAGTTATAG AGAAAGCCAT TTTGCATTGG AATTACTGCA 120 TCAATCACAT TTAATTTCCT CAATGGATTT AGTTGAAGTA AATCCATTGA TTGACAGTAA 180 TAATCATACT GCTGAACAAG CGGTTTCATT AGTTGGAACA TTTTTTGGTG AAACTTTATT ATAAATAAAT GATTTGTAGT GTATAAAGTA TATTTTGCTT TTTGCACTAC TTTTTTAAT 240 300 TCACTAAAAT GATTAAGAGT AGTTATAATC TTTAAAATAA TTTTTTTCTA TTTAAATATA 360 420 480 600 660 720 780

TTGATTCAAT CGGTTTCAAA GGCTGTGCAA TATATGGCTA AAAGACGTAT AGGTGCATTA TTGATTCAAT CGGTTTCAAA GGCTGTGCAA TATATGGCTA AAAGACGTAT AGGTGCATTA
ATTGTCTTTG AAAAAGAAC AGGTCTTCAA GATTATATTG AAACAGGTAT TGCCAATGGA
TTCAAATATT TCGCAAGAAC TTTTAATTAA TGTCTTTATA CCTAACACAC CTTTACATGA
TGGTGCAAKG ATTATTCAAG GCACGAARAT TGCAGCAGCA GCAAGTTATT TGCCATTGTC
TGRWAGTCCT AAGATATCTA AAAGTTGGGT ACAAGACATA GAGCTGCGGT TGGTATTTCA
GAAGTTATCT GATGCATTAA CCGTTATTTGT ATCTGAAGAA ACTGGTGAAC TTTCCGTAAC ATTTGATGGA AAATTACGAC GAGACATTTC AAACCGAAAT TTTTGAAGAA TTGCTTGCTG AACATTGGTT TGGCACACGC TTTCAAAAGA AAGKKKTGAA ATAATATGCT AGAAAKTAAA
TGGGGCTTGA GATTTATTGC CTTTCTTTTT GGCATTGTTT TTCTTTTTAT CTGTTAACAA
TGTTTTTGGA AATATTCTTT AAACACTGGT AATTCTTGGT CAAAAGTCTA GTAAAACGGA TTCAAGATGT ACCCGTTGAA ATTCTTTATA ACAACTAAAG ATTTGCATTT AACAAAAGCG CCTGAAACAG TTAATGTGAC TATTTCAGGA CCACAATCAA AGATAATAAA AATTGAAAAT CCAGAAGATT TAAGAGTAGT GATTGATTTA TCAAATGCTA AAGCTGGAAA ATATCAAGAA GAAGTATCAA GTTAAAGGGT TAGCTGATGA CATTCATTAT TCTGTAAAAC CTAAATTAGC AAATATTACG CTTGAAAACA AAGTAACTAA AAAGATGACA GTTCAACCTG ATGTAAGTCA GAGTGATATT GATCCACTTT ATAAAATTAC AAAGCAAGAA GTTTCACCAC AAACAGTTAA AGTAACAGGT GGAGAAGAC AATTGAATGA TATCGCTTAT TTAAAAGCCA CTTTTAAAAC TAATAAAAAG ATTAATGGTG ACACAAAAGA TGTCGCAGAA GTAACGGCTT TTGATAAAAA AAGGCTTATA TAAATGTAAA ATAAATAGCT AAATTAAAGG AGAGTAAACA ATGGGAAAAT ATTTTGGTAC AGACGGAGTA AGAGGTGTCG CAAACCAAGA ACTAACACCT GAATTGGCAT TTAAATTAGG AAGATACGGT GGCTATGTTC TAGCACATAA TAAAGGTGAA AAACACCCAC GTGTACTTGT AGGTCGCGAT ACTAGAGTTT CAGGTGAAAT GTTAGAATCA GCATTAATAG CTGGTTTGAT TTCAATTGGT GCAGAAGTGA TGCGATTAGG TATTATTTCA ACACCAGGTG
TTGCATATTT AACACGCGAT ATGGGTGCAG AGTTAGGTGT AATGATTTCA GCCTCTCATA
ATCCAGTTGC AGATAATGGT ATTAAATTCT TTGSCTCGAC CNCCNNGCTN GCA 

# (2) INFORMATION FOR SEQ ID NO: 65:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2976 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 65:

GRTCGACTCT AGAGTCGATC TTTAAATGGG TCTCTTTCAA CAACCGCGTC ATATTTTTMA ACATAACCTT TTTTRATAAG TCCATCTAAA CTGGATTTTR AAAAGCCCAT ATCCTCAATA GATGTTAATT CTGGTTGTAT ATCTTTCACT TCTATGATTT TTTTTAACTT CGAAACGTCA
AGTTGTGCAT CAGGTTCTGC TGTTACTTCC ATTACATAAC CTTGAATCGT TCTTGGTCCA
AAAGGTACAA TTACACGCAC ACCAGGTTGG ATGACAGATT CGAGTTGTTC GGGAATTATA
TAATCAAATT TATAGTCAAC GCTCTTCGAC GCGACATCGA CTATGACTTT CGCTATCATT ATKGCCACCT AGTTTCTAGT TCATCTAAAA TTTGTGCAGC WAATACTACK TTTTKNCCTT
YCTTGATATT TACKTTTCA TTAKTTTTAA AATGCATTGT CAATTCATTA TCATCAGAAC
TAAATCCGAT AGACATATCC CCAACATTAT TTGAAATAAT CACATCTGCA TTTTTCTTGC GTAATTTTTG TTGTGCATAA TTTTCAATAT CTTCAGTCTC TGCTGCAAAG CCTATTAAAT ACTGTGATGT TTTATGTTCA CCTAAATATT TAAGAATGTC TTTAGTACGT TTAAAAGATA
CTGACAAATC ACCATCCTGC TTTTCATCT TATGTTCCTA ATACATCAAC CGGTGTATAG
TCAGATACGG CTGCTGCTTT TACAACAATA TYTTGTTCCG TYAAATCGGC TTGTCACTTG GTTCAAACAT TTCTTCAGGC ACTTTGRACA TGAATAACTT CAATATCTTT TGGATCCTCT AGTGTTGTAG GACCAGCAAC TAACGTCACG ATAGCTCCTC GATTTCGCAA TGCTTCAGCT ATTGCATAGC CCATTTTTCC AGAAGAACGA TTGGATACAA ATCTGACTGG ATCGATAACT TCAATAGTTG GTCCTGCTGT AACCAATGCG CGTTTATCTT GAAATGAACT ATTAGCTAAA CGATTACTAT TTTGAAAATG AGCATCAATT ACAGAAACGA TTTGAAGCGG TTCTTCCATA CGTCCTTTAG CAACATAACC ACATGCTAGA AATCCGCTTC CTGGTTCGAT AAAATGATAC CCATCTTCTT TTAAAATATT AATATTTTGC TGCGTTACGT TTATTTTCAT ACATATGCAC 

ATTCATAGCA	GGCGCAATAA	ATTTCGGTGT	CTCTGTTGCT	AGCAACGTTG	ATGTCACCAA	1680
ATCATCAGCA	ATACCTACAC	TCAATTTTGC	AATTGTATTT	GCCGTTGCAG	GTGCAACAAT	1740
GATTGCATCK	GCCCAATCCA	CCTAATGCAA	TATGCTGTAT	TTCTGGAAGG	ATTTTYTTCT	1800
ATAAAAGTAT	CTGTATAAAC	AGCATTTCGA	MTTATTGCTT	GAAATGCTAA	TGGTGTCACA	1860
AATTTTTGTG	CGTGATTCGT	TAAACATAAC	GCGAACTTCA	TAACCCAGAT	TGTGTTAACT	1920
TACTTGTCAA	ATCAATTGCT	TTATATGCCG	CAATGCCACC	TGTAACGGCT	AATAATATTT	1980
TCTTCATATT	CAATCTCCCT	TAAATATCAC	TATGACATTT	ACGCTTTACA	TCATCATATG	2040
CGCACAAATG	CTCATTACTT	TTTTATAGAT	ACAAATTTAG	TATTATTATA	ACATCAATCA	2100
TTGGATAAAC	TAAAAAAACA	CACCTACATA	GGTGCGTTTG	ATTTGGATAT	GCCTTGACGT	2160
ATTTGATGTA	ACGTCTAGCT	TCACATATTT	TTAATGGTCG	AAACTATTCT	TTACCATAAT	2220
AATCACTTGA	AATAACAGGG	CGAATTTTAC	CGTCAGCAAT	TTCTTCTAAC	GCTCTACCAA	2280
CTGGTTTAAA	TGAATGATAT	TCACTTAATA	ATTCAGTTTC	AGGTTGTTCA	TCAATTTCAC	2340
GCGCTCTTTT	CGCTGCAGTT	GTTGCAATTA	<b>AATACTTTGA</b>	TTTAATTTGT	GACGTTAATT	2400
GGTTTAAAGG	TGGATTTAAC	ATTATTTTTT	AGCCTCCAAA	ATCATTTTTC	TATACTTAGC	2460
TTCTACGCGC	TCTCTTTTTA	AGTGCTCAGC	TTCTACAATA	CATTGAATTC	TATTCTTCGC	2520
AAGTTCTACT	TCATCATTAA	CTACAACGTA	ATCGTATAAA	TTCATCATTT	CAACTTCTTT	2580
ACGCGCTTCG	TTAATACGAC	TTTGTATTTT	CTCATCAGAT	TCTGTTCCTC	TACCTACTAA	2640
TCGCTCTCTC	AAGTGTTCTA	AACTTGGAGG	TGCTAAGAAA	ATAAATAGCG	CATCTGGAAA	2700
TTTCTTTCTA	ACTTGCTTTG	CACCTTCTAC	TTCAATTTCT	AAAAATACAT	CATGACCTTC	2760
GTCCATTGTA	TCTTTAACAT	ATTGAACTGG	TGTACCATAA	TAGTTGCCTA	CATATTCAGC	2820
ATATTCTATA	AATTGGTCAT	CTTTGATTAA	AGCTTCAAAC	GCATCCCTAG	TTTTAAAAAA	2880
GTAATCTACG	CCATTCAACW	TCACCTTCAC	GCATTTGACG	TGTTGTCATT	GGAATAGRAG	2940
AGCTTRANNG	ATGTATNGNG	ATCGACCTGC	AGTCAT			2976

# (2) INFORMATION FOR SEQ ID NO: 66

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 540 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 66:

TACCCGGGGA CO	CTTGAAAAA	TACCTGGTGT	ATCATACATA	AATGANGTGT	CATCTANAGG	60
AATATCTATC AT	TATCTNAAG	TTGTTCCAGG	GANTCTTGAA	GTTGTTACTA	CATCTTTTTC	120
ACCAACACTA GO	CTTCAATCA	GTTTATTAAT	CAATGTAGAT	TTCCCAACAT	TCGTTGTCCC	180
TACAATATAC AG						240
GCCCCAGCCT T	TTTCAGCTG .	AAATTAATAC	GACATCGTCA	GCTTCCAAAC	CATATTTTCT	300
TGCTGTTCGT T	TTAACCATT	CTTTAACTCG	ACGTTTATTA	ATTTGTTTCG	GCAATAAATC	360
CAATTTATTT GO						420
AAATGATCCT TO						480
AAGTCCTGAT A	ATTAATTA.	AAAAGTCTTC	ACTTTCTAAT	CCTACATCTT	GAACTTCGTT	540

# (2) INFORMATION FOR SEQ ID NO: 67:

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 519 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 67:

GACGCGTAAT	TGCTTCATTG	AAAAAATATA	TTTGTNGAAA	GTGGTGCATG	ACAAATGTAC	60
TGCTCTTTTT	GTAGTGTATC	AGTATTGTGA	TGTTTTAATG	AGAATATTAT	ATGAATCATT	120
ATGAAATTTA	ATAAAAATAA	AAGAAATGAT	TATCATTTTT	TCTTATATAC	TGTTAAACGG	180
		ACTGTATTGG				240
GAGTATTTCA	AATTGAAAAG	TATTATGAGC	GTGATACATA	ATCAAAATTG	TAGGCTCAAG	300
		TAAGCGGTTC				360
		GAGTTTGAAG				420
TATTGTTAGA	AGGAATTTTT	ACAAATTCAG	CGAGTGCAAT	CGAATATTCA	GACTTACATC	480
ATAAAAGTAA	GTTTGATTCA	AAGCGTCCTA	AGTTAATGC			519

### (2) INFORMATION FOR SEQ ID NO: 68:

(xi)

### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(D) TOPOLOGY: linea

SEQUENCE DESCRIPTION: SEQ ID NO: 68:

#### ACCAATATAT GCATCTGAAC GACTTAATAT CTTTTCGCCT GTGTTTAACA CTTTACCTGC 60 AGCGTTAATA CCTGCCATCA ATCCTTGTCC TGCTGCTTCT TCATAACCAG ATGTACCATT AATTTGACCT GCAGTATATA AGTTTTTAAT CATTTTCGTT TCAAGTGTAG GCCATAACTG 120 180 CGTTGGCACA ATCGCATCAT ATTCAATTGC GTAGCCGGCA CGCATCATAT CTGCTTTTTC 240 AAGACCTGGT ATCGTCTCTA ACATTTGACG TTGCACATGT TCAGGAAGAC TTGTNGACAA 300 TCCTTGCACA TATACTTCAT TTGTATTAAC GACCTTCAGG CTCTAAGAAA AAGTTGATGT CGCGGCTTAT CATTAAATCG AACAAATTTA TCTTCAATTG AAGGGCAATA ACGTGGCCCG 360 420 GTTCCTTTAA TCATCCCTGA ATACATTGCA GATAGATGTA AATTATCATC GATAACTTTG 480 TGTGTTTCAN CATTAGTATA CGTTAGCCAA CATGGCAATT GATCKAMYAT ATATTCTGTT 540 GTTTCAAAGC TGAATGCACG ACCTACATCG TCACCTGGTT GTATTTCAGT CTTCGAATAR TCAATTGTTT TTGAATTGTA CACGGCGGWG GTGTACCTGT TTTAAAACGA ACAATATCAA 600 660 AACCAAGTTC TCTTARATGK GKSTGATAAT GTGATTGATG GTAATTGGTG GATTTGGTCC 720 ACTTGAATAC TTCATATTAC CTAAAATGAT TTCACCACGT ATRAAATGTT GCCCGTWGTA ATAATTACTG CTTTAGATAA ATACTCTGTA CCAATATTTG TACGTACACC TTKAACTGTC ATTAWCTTCT ATAAKAGTT CGTCTACCAT ACCTTGCATT AATATGCAAA TTTTCTTCAT 780 840 900 CTTCAATCAM GCGTTTCATT TCTTGTTGAT AAAGTACTWT AKCTGCTTGC GCCKCTWAGT 960 GCTCTTACAR CAGGTCCTTT AACTGTATTT AACATTCTCA TTTGAATGTG TGTTTTATCG ATTGTTTTTG CCATTTGTCC ACCTAAAGCA TCAATTTCAC GAACAACGAT ACCTTTAGCT 1020 1080 GGTCCACCTA CAGATGGGTT ACATGGCATA AATGCAATAT TATCTAAATT TATTGTTAGC 1140 ATTAATGTTT TAGCACCACG TCTTGCAGAT GCTAAACCTG CTTCTACACC TGCATGTCCC 1200 GCACCTATAA CGATTACATC ATATTCTTGA ACCACAATAT AAACCTCCTT ATTTGATATC TTACTAGCCK TCTTAAGACG GTATTCCGTC TATTTCAATT ACTATTACC TAAGCAGAAT 1260 1320 TGACTGAATA ACTGATCGAT GAGTTCATCA CTTGCAGTCT CACCAATAAT TTCTCCTAAT 1380 ATTTCCCAAG TTCTAGTTAA ATCAATTTGT ACCATATCCA TAGGCACACC AGATTCTGCT 1440 GCATCAATCG CMTCTWGTAT CGTTTGTCTT GCTTGTTTTA ATAATGAAAT ATGTCTTGAA TTAGAAACAT AAGTCATATC TTGATTTTTG TACTTCTCCA CCAAAGAACA AATCTCGAAT 1500 1560 TTGTATTCT AATTCATCAA TACCTCCTTG TTTTAACATT GAAGTTTGAA TTAATGGCGT 1620 ATCACCTATC ATATCTTTAA CTTCATTAAT ATCTATGTTT TGCTCTAAAT CCATTTTATT AACAATTACG ATTACATCTT CATTTTTAAC CACTTCATAT AATGTGTAAT CTTCTTGAGT 1680 1740 CAATGCTTCG TTATTGTTTA ATACAAATAA AATTAAGTCT GCTTGGCTAA GAGCCTTTCT AGAGCGTTCA ACACCAATCT TCTCTACTAT ATCTTCTGTC TCACGTATAC CAGCAGTATC 1860 AACTAATCTT AATGGCACGC CACGAACATT GACGTAMTCT TCTAAGACAT CTCTAGTAGT ACCTGCTACY TCAGTTACAA TCGCTTTATT ATCTTGTATT AAATTATTTA ACATCGATGA 1920 1980 TTTACCTACG TTTGGTTTAC CAACAATAAC TGTAGATAAA CCTTCACGCC ATAATTTTAC 2040 CCTGCGCACC GGTATCTAAT AAACGATTAA TTTCCTGTTT GATTTCTTTA GACTGCTCTA AAAGAAATTC AGTAGTCGCA TCTTCAACAT CATCGTATTC AGGATAATCA ATATTCACTT CCACTTGAGC GAGTATCTCT AATATAGATT GACGTTGTTT TTTGATTAAG TCACTTAGAC 2100 2160 2220 GACCTTCAAT TTGATTCATC GCAACTTTAG AAGCTCTATC TGTCTTCGAG CGAWWAAAGT 2280 CCATAACTGY TTCAGCTTGA GATAAATCAA TACGACCATT TAAAAAGGCA MGTTTTGTAA ATTCAACCTG GCTCAGCCAT TCTAGCGCCA TATGTCATAG TAAGTTCCAG CACTCTATTA 2340 2400 ATCGTTAAAA TACCACCATG ACAATTAATT TCTATAATAT CTTCGCGTGT AAATGTTTTT GGCGCTCTTA ACACAGACAC CATAACTTNT TCAACCATTC TTTAGACTCT GGATCAATAA 2520 TATGACCGTA ATTAATCGTA TGTGATGGAA CATCATTTAA AAGATGTTTT CCTTTATATA ATTTGTCAGC AATTTCAACG GCTTGCGGTC CAGACAATCG AACAATTCCA ATTGCCCCTT 2580 2640 CACCCATTGG TGTTGAAATA CTCGTAATTG TATCTAAATC CATATTGCTA CTCGCCTCCT 2700 TCAACGATGT GAATACATTT TAAAGTAAGT TATTATAACC CTAAGGTCAG TCTTAACGTT 2760 TGTCTGAGGT AAGACTTCGG GATGTGTTGA GTGGTTAATG TTTTCCTTCC CCTACCCTAT CCTTACTTAA TCTTTTTATT AAAAACTTTG GCAATTTTAA GTACGTGCTC AAGACTATTC 2820 2880 TGTATTTGTA AAGTCGTCAT ATCTTTAGCT GGCTGTCTTG CTATTACAAT AATATCTTTG 2940 GCCAATATAT GCGACTTATG TACTTTGAAA TTTTCACGTA TTGCTCTTTT AATCTTGTTT CTTAACACTG CATTACCTAG TTTTTTAGAA ACACTAATAC CTAAGCGAAA ATGGTCTATT 3000 3060 TCTTTATTAT TACAAGTGTA TACAACAAAT TGTCTGTTGG CTACAGAATG ACCTTTTTTA 3120 TATATTCTCT GAAAATCTGC ATTCTTTTA ATTCGGTAAG CTTTTTCCAA TAACATCACT 3180 CGCTTATTTA TCGTTTTTAT TTGAAGCTAT ATTTAAACTT CTATTGAGCT TATAACATAA 3240 ATTTCTATTT ATTCTTAATT TAAACGAAAA AAAAGATCGA CTCTAGAGGA TCCCCGGGTA 3300 3308 CCGAGCTC

- (2) INFORMATION FOR SEQ ID NO: 69:
  - (i) SEOUENCE CHARACTERISTICS:

(A) LENGTH: 1004 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 69:

N COMMIN COCCOM	መአ አመአ ረጥጥረ አ	ACCNAAAACC	ר א א ייייי א יי	<b>አ</b> ተአተርተልተልር	AAAAGGCTTG	60
AGTTACGGCT					GTCTAANATA	120
CTCAAACTTG	CTAATGAGGA	TTTAGGTGCT	GACATGTATC	AGTTGCTGAT	<b></b>	
GAACAATCTC	CTTTCCATCA	ATACGAAATA	TCTAATTTTG	CATTAGATGG	CCATGANTCN	180
NAACATAATA	AGGTTTACTG	GTTTAATGAG	GAATATTATG	GATTTGGAGC	AGGTGCAAGT	240
GGTTATGTAN	ATGGTGTGCG	TTATACGAAT	ATCAATCCAG	TGAATCATTA	TATCAAAGCT	300
ATNAATAAAG	AAAGTAAAGC	AATTTTAGTA	TCAAATAAAC	CTTCTTTGAC	TGAGAGAATG	360
GAAGAAGAAA	TGTTTCTTGG	GTTGCGTTTA	AATGAAAGTG	TGAGTAGTAG	TAGGTTCAAA	420
AAGAAGTTTG	ACCAATCTAT	TGAAAGTGTC	TTTGGTCAAA	CAATAAATAA	TTTAAAAGAG	480
AAGGAATTAA	TTGTAGAAAA	AGAACGATGT	GATTGCACTT	ACAAATAGAG	GGAAAGTCAT	540
ANGTAATGAG	GTTTTTGAAG	CTTTCCTAAT	CAATGATTAA	GAAAAATTGA	AATTTCGAGT	600
CTTTAACATT	GACTTANTTT	GACCAATTTG	ATAAATTATA	ATTAGCACTT	GAGATAAGTG	660
AGTGCTAATG	AGGTGAAAAC	ATGANTACAG	ATAGGCAATT	GAGTATATTA	AACGCAATTG	720
TTGAGGATTA	TGTTGATTTT	GGACAACCCG	TTGGTTCTAA	AACACTAATT	GAGCGACATA	780
ACTTGAATGT	TAGTCCTGCT	ACAATTAGAA	ATGAGATGAA	ACAGCTTGAA	GATTTAAACT	840
ATATCGAGAA	GACACATAGT	TCTTCAGGGC	GTTCGCCATC	ACAATTAGGT	TTTAGGTATT	900
ATGTCAATCG	TTTACTTGAA	CAAACATCTC	ATCAAAAAAC	AAATAAATTA	AGACGATTAA	960
ATCAATTGTT	AGTTGAGAAC	AATATGATGT	TTCATCAGCA	TTGA		1004

- (2) INFORMATION FOR SEQ ID NO: 70:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1021 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

SEQUENCE DESCRIPTION: SEQ ID NO: 70:

CCTGCAGGTC GATCCTGACA ACATTCTAAT TGTATTGTTT AATTATTTTT TGTCGTCGTC TTTTACTTCT TTAAATTCAG CATCTTCTAC AGTACTATCA TTGTTTTGAC CAGCATTAGC ACCTTGTGCT TGTTGTTGCT GTTGAGCCGC TTGCTCATAT ACTTTTGCTG ATAATTCTTG 120 180 AATCACTTTT TCAAGTTCTT CTTTTTTAGA TTTAATATCT TCTATATCTT GACCTTCTAA 240 AGCAGTTTA AGAGCGTCTT TTTTCTCTTC AGCAGATTTT TTATCTTCTT CACCGATATT TTCGCCTAAA TCAGTTAAAG TTTTTTCAAC TTGGAATACT AGACTGTCAG CTTCGTTTCT TAAGTCTACT TCTTCACGAC GTTTTTTATC TGCTTCAGCG TTAACTTCAG CATCTTTTAC 300 360 420 CATACGGTCR ATTTCTTCGT CTGATAATGA AGAACTTGAT TGAATTGTAA TTCTTTGTTC 480 TTTATTTGTA CCTAAGTCTT TTGGCAGTTA CATTTACAAT ACCGTTTTTA TCGATATCAA ACGTTACTTC AATTTGGAGG TTTACCACCG TTTCARMWGG TGGAATATCA GTCAATTGGA ATCTACCAAG TGTTTTATTA TCCGCAGCCA TTGGACGTTC ACCTTGTAAT ACGTGTACAT 540 600 660 CTACTGATGG TTGATTATCT ACTGCTGTTG AATAGATTTG AGATTTAGAT GTAGGAATCG 720 TAGTGTTACG TTCAATTAAC GTATTCATAC GTCCACCTAA AATTTCAATA CCTAAAGATA GTGGTGTTAC GTCTAATAAT ACTACGTCTT TAACGTCACC TGTGATAACG CCACCTTGGA TTGCAGCTCC CATTGCCACT ACTTCGTCCG GGTTTACTCC TTTGTTAGGC TCTTTACCGA 780 840 900 TTTCTTTTTT GACAGCTTCT TGTACTGCTG GAATACGAAT TGATCCACCA ACTAAGATAA CTTCATCGAT ATCTGANTTT GTTAAGCCAG CGTCTTTCAT TGCTTGGCGT GTAGGTCCAT 960 1020 1021

- (2) INFORMATION FOR SEQ ID NO: 71:
  - (i) SEOUENCE CHARACTERISTICS:

(A) LENGTH: 3010 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 71:

				3 M C 3 M C 3 M C 3	******	<b>C</b> 0
ATGCCTGCAG	GTCGATCACG	ATGNAAGTCA	TTCAATAAGA	ATGATTATGA	COMMUNICA	60
AGCAGTAAGA	TATTTTCTAA	TTGAAAATCA	TCTCACTGCT	GTTTTTTAAA	GGITTATACC	120
TCATCCTCTA	AATTATTTAA	AATTAATTAA	TGGTATTTGA	GCACGTTTAG	CGACTTTATG	180
ACTGACATTA	CCAATTTCCA	TTTCTTGCCA	GATATTCAAA	CCACGTGTAC	TCAAAATGAT	240
AGCTTGGTAT	GTACCTCCAA	TAGTAATTTC	AATAACTTTG	TCTGTTGAAC	ACTAAGAGCA	300
<b>ΔጥጥጥΔ Δጥጥ</b> ጥ	CATAATGTGT	TGTAAACATT	TTTTTTGATT	GGAGTTTTTT	TCTGAGTTAA	360
<b>ልሮ</b> ርልጥልጥሮሮጥ	GATGTATTTT	TAATTTTGCA	CCATTTCCAA	AAGGATAAGT	GACATAAGTA	420
AAAAGGCATC	ATCGGGAGTT	ATCCTATCAG	GAAAACCAAG	ATAATACCTA	AGTAGAAAAG	480
TGTTCAATCC	GTGTTAAATT	GGGAAATATC	ATCCATAAAC	TTTATTACTC	ATACTATAAT	540
ጥሮ አ አጥጥጥጥ አ አ	CGTCTTCGTC	CATTTGGGCT	TCAAATTCAT	CGAGTARTGC	TCGTGCTTCT	600
ርር እ አጥጥር አጥጥ	CTCTCTTCAT	CAATTGATGT	CGAAGTTCGC	TAGCGCCTCT	TATGCCACGC	660
<b>ልሮልጥል</b> ርልጥጥጥ	TAAAGAATCT	ACGCAAGCTC	TTGAATTGTC	GTATTTCATC	TTTTTCATAT	. 720
ጥጥርጥጥል አልሮል	ATGATAAATG	CAATCTCAAT	AGATCTAATA	GTTCCTTGCT	TGTGTGTTCG	780
CCTCCTTCTT	<b>TTTCAAAAGC</b>	GAATGGATTG	TGGAAAATGC	CTCTACCAAT	CATGACGCCA	840
TCAATCCCAT	ATTTTTTCTCC	CAGTTCAAGT	CCTGTTTTTC	TATCGGGAAT	ATCACCGTTA	900
AUTOCOMI	ATTITUTE	TGCAATTTCG	TCACGTAAAT	TTTTAATAGC	TTCGATTAAT	960
TCCCNATCTC	CATCTACTT	ACTCATTTCT	TTACGTTGTA	CGAAGATGAA	TAGATAAATT	1020
CCCAAIGIG	TOTTOGARGA	CAKTGCTTCA	ACCAATCTTT	CCATTCATCG	ATTTCATAKT	1080
ACCCAAIGICI	TOTTCOAAGA	ACTTTACCGG	AASCCCACCT	GCTTTAGTCG		1140
MUCCAAGGCG	ACCTCACCTC	TTAACATTAA	GCCGGANCCC	TTACCCTTTT	TAGCAACATT	1200
TTCGGCAGCA	CARCCCARAT	TIMMOMITAG	GCCTTTAAAG	CCCATTTTAG	CTAATTGAAT	1260
TGCTACAGGA	CATCCCATAT	CTCCCCTTATC	TCCCCATATA	TGAGCGACCA	TCGGCTGTTC	1320
ACTCGTTTCA	CGGAACIGII	CTGGCTTATC	ACTATGTATG	CCTTCAGGGT	GGCAAAAGCT	1380
ATCTTCACTA	AAAGTTAAGC	GICCGCGCAC	ATCCRGTCTA	CUTCCTTCAN	TTACAACGTG	1440
TTCAGTATTT	GTAAATTCAG	TGAAAAACAC	TGGCGCCAAA	סתומכווכתו	GACGTGGTAA	1500
	ATATCTGTAA	CGTCTTCCAT	TTTATACCCT		AGTATCTCGA	1560
TTCACTCCAA	AAATTTTCTT	TCATAATATA	COMPACEE	TACAAAACCA	AGTATOTOM	1620
TTTTTTATGC	ATGATGATAT	TACCACAAAA	GCNTAACTTA	A TRANSPORTE	TCCTNNCTTC	1680
ATGCAACCAT	TKGAAAAGGG	AAGTCTAAGA	GTAGTCTAAA	TTATELLIG	TACACTACTT	1740
ATCAATACAA	AGATCAAGGA	TTATAGTATT	AAATTGTTCA	TIMITAMIGA	TACACIACIA	1800
ATGAATATGA	TTCAGAATTT	TCTTTGGCTA	CTNCTTACAG	COMMUN N A CC	ATTOTIAL	1860
CTTATAACAA	AGACAAATTT	CTAAAGGTGA	TATTATGGAA	CGIIIAAAGC	TOCONTROCOT	1920
AAGTTTAGGT	TGGTGGGATT	NATTTTTTGC	GATACCTATT	TTTCTGCTAT	TCGCATACCT	1980
TCCAAACTNT	AATTTTATAA	NCATATTTCT	TAACATTGTT	ATCATTATTT	CCLLITCONI	2040
AGGTTTGATT	TTAACTACGC	ATATAATTAT	AGATAAAAYT	AAGAGCAACA	CGAAATGAAT	2100
			ACTGAAGGAG	CGATTACAAT	GGCGACTAAG	
	ATGATTTATT		GTGAATTCAA	ACGCGGTTAA	GACAAGAAAG	2160
ATGATGGGAG	AATATATTAT	TTATTATGAT	GGCGTGGTTA	TAGGTGGTTT	GTATGATAAT	2220
AGATTATTGG	TCAAGGCGAC	TAAAAGTGCC	CAGCAGAAAT	TGCAAGATAA	TACATTAGTT	2280
TCGCCATATC	CAGGTTTCTA	AAGAAATGAT	ATTAATTTTA	GACTTTACCG	AAGCAACAAA	2340
TCTCACTGAT	TTATTTAAGA	CCATAAAAAA	TGATTTGAAA	AAGTGAAGTA	GTGAAGTGTG	2400
GGTGCAGAGA	GAACTAAGCC	CATCGWTAAA	TGGTCGCTTG	TTAAAGAAGA	GTGACGGTCA	2460
CTCTTCTTTA	TGTGCATATT	TTATTTTGTC	TGTTTBGTTA	ACAAGCAGCA	GTGTAACAAA	2520
TATGAGTAAG	GATAAAATGA	GTATAATATA	GAAACCGAAT	TTATCATTAA	TTTCATTAAT	2580
<b>ርር</b> አጥርጥጥርርጥ	DADATEGAG	СВАТТВВАСТ	TTGCAGTAAC	AATGAAATTG	ACGTCCATAT	2640
CCTAAATCAC	CCACCCACAT	ATTTATCTGA	AACAGTGTTC	ATTATAGCWG	TATTCATATA	2700
AATTCTGATT	GATGAAATTG	AGTAGCCTAG	TATAAAKGAT	' CCTATGAATA	AGTAAAATGC	2760
TGAGTTTATC	CAAATAAATA	GTGCKGAATT	TATGACTRRC	TATGAAATAT	AACAAAAATA	2820
ጥሮአሮአጥአሮጥጥ	TACKTCACAT	TTTCTTSGAA	AGAATAGCTG	AAATTAAACC	TGCACATAAT	2880
CCTCCAATGC	САТАТААСАТ	ATCTGAAMAA	CCAAAKTGTA	. CAGACCGAAA	GTTTTAAAAC	2940
ATTATAAACA	TATCCTGGTA	ATGATATGTT	AAAGATCGAC	TCTAGAGGAT	CCCCGGNTAC	3000
CGAGCTCGAA						3010
			i i			

# (2) INFORMATION FOR SEQ ID NO: 72:

# (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	548 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TODO! OCV .	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 72:

ATCGGTACCC GGGGACCA	AT ANACAGAAAG	TATATTAAGT	TTNGTAAATA	ATGTACGTAC	60
TNAAGATGGT GGTACACA	TG AAGTTGGTTT	TAAAACAGCA	ATGACACGTG	TATTTAATGA	· 120
TTATGCACGT CGTATTAA	TG AACTTAAAAC	AAAAGATAAA	AACTTAGATG	GTAATGATAT	180
TCGTGAAGGT TTAACAGC	TG TTGTGTCTGT	TCGTATTCCA	GAAGAATTAT	TGCAATTTGA	240

TGCAGACAA AAAAAGCGA GTTCAGGTA	G AAATCTAAAT A TTGCCATTCT T TAAAGCACAA A GAAAAACAAG A ACACTGGAAA	ATTTAGAAGA CAAGCAAGGG CGTAAAGACA	AAAAGGACAA AAGCTGCACG CTTTGCTATC	TTGTCTAAAT TAAAGCTCGT TGGTAAATTA	CACTTGTGGA GAAGATGCTC ACACCTGCAC	300 360 420 480 540 548
(2) INFOR	MATION FOR S	EQ ID NO:	73 :			-
(i)	SEQUENCE CHAI	RACTERISTICS	S: '			
	(A) LENGTH: (B) TYPE: (C) STRANDE: (D) TOPOLOG	ONESS:	541 bas nucleic single linear	c acid		
(xi)	SEQUENCE DES	CRIPTION: SI	EQ ID NO:	73:		
TAAATGATA CCAAATATA TTATATTGC GCAAATGTA TTAGTAATA AACCTGAGC CATCCAAAA	C GAGTCCAGAG G CCATAATCGG A TAATAGCTGT G TATTTAACGA A TTGTAATTAA T AGTAAGCTGG C AAAGTCGCTT T ACTGCACCTG A ACTCTCGAAC	TACAATTAAC TACGATTGCT CTCCGCAATT AATCGCAAAT ACCACCACG CTATAAATGC GACCGCCTAA	GAAGATGACG AAAATAATAC GTATTAGATT ACGATACCTA GAATCCACCA ACTCGCTGCA AACAATCGCA	TAGCAATACT CTGTGATTAC GCACTGTGTT GCCATTTTTG TCTTTATCAT CCTATAAATG GTCGCAACAC	ACGTACACCA TGGACTAATA AAATACAAAT ATTTAAACCT GTACTTTATA CAATAACCCA CAGCAATATT	60 120 180 240 300 360 420 480 540
(2) INFOR	MATION FOR S	EQ ID NO:	74:			
(i)	SEQUENCE CHA	RACTERISTIC	S:			
	(A) LENGTH: (B) TYPE: (C) STRANDE (D) TOPOLOG	DNESS: Y:	558 bas nucleic single linear			
(xi)	SEQUENCE DES	CRIPTION: S	EQ ID NO:	74:		
ATKCAAGAT ATTATTCAA ATTTTATAT AAAACAGTC AGCAATGGT TAATAATGG AAGCTTACT	C ACGGTACCCG T TATCACTTGA G AGCGTGCATT G CAATGTATTC G GTGATGTTAT C CGTTTAAGTC T AGTATCGATA A GCTGAAGAGT T GATACGACAC T GGTTCTAC	AGATGTTTTA GCCAGATGTT AAGTGGTAAT TGGTCAATAT AAGACTGGAA ATGATCCGCC TATTACGTGA	GGTGATCGCT CGTGATGGTT ACACACGATA CATCCACATG GTTACGACAT AGCGGCAATG TATTAATAAA	TTGGAAGATA TAAAACCAGT AAAATTTCCG GGAGACTCCT GTCTTAATAG CGTTACACTG GAGACAGTTT	TAGTAAATAT ACAACGTCGT TAAAAGTGCG CAGTGTACGA AAATGCATGG AAGCTAAGTT CTTTCATTCC	120 180 240 300 360 420 480 540 558
(2) INFOR	MATION FOR S	EQ ID NO:	75:			
(i)	SEQUENCE CHA	RACTERISTIC	S:			
(wi)	(A) LENGTH: (B) TYPE: (C) STRANDE (D) TOPOLOG	DNESS: Y:	nuclei single linear			
	SEQUENCE DES					<b>~</b> ^
AACGTGGCA TACATTGTT TGGCGTAAG	T TATTCTACAT T TCTTAATCAA T ATGGTTTATA SA AACATCCGCC C ACTTTGTAAC	CTTCTTCATA CCATGCAGCA ACGTTGGCAA	ATGGGAATTT TTGTTTATAG AATGGTTTCA	GGCATGGTAT GTTATGGCTA CAACAGCACT	CGAAGTGTAT TTATGAACGT TAGCATTGTG	60 120 180 240 300

AGGAGAATTT AATTATGGAA TTTAGAGAAC AAGTATTAAA TTTATTAGCA GAAGTAGCAG. AAAAATGATA TTGTAAAAGA AAATCCAGAC GTAGAAATTT TTGAAGAAGG TATTATTGAT 420 TCTTTCCAAA CAGTTGGATT ATTATTAGAG ATTCAAAATA AACTTGATAT CGAAGTATCT 480 ATTATGGACT TTGATAGAAG ATGAGTGGGC MACACCAAAT AAAATCGTTG AAGCATTAGA 540 AGAGTTACGA TGAAATTAAA ACCTTTTTTA CCCATTTTAA TTAGTGGAGC GGTATTCATT 600 GTCTTTCTAT TATTACCTGC TAGTTGGTTT ACAGGATTAG TAAATGAAAA GACTGTAGAA 660 GATAATAGAA CTTCATTGAC AGATCAAGTA CTAAAAGGCA CACTCAWTCA AGATAAGTTA 720 TACGAATCAA ACAAGTATTA TCCTATATAC GGCTCTAGTG AATTAGGTAA AGATGACCCA TTTAATCCTG CAATTGCATT AAATAAGCAT AACGCCAACA AAAAAGCATT CTTATTAGGT 840 GCTGGTGGTT CTACAGACTT AATTAACGCA GTTGAACTTG CATCACAGTT ATGATAAATT AAAAGGTTAA GAAATTAACA TTTATTATTT CACCACAATG GTTTACAAAC CCATGGTTTA 960 ACGAATCCAA AACTTTGATG CTCSTATGTC TCAAACTCMA ATTAATCAAA TGTTCCCASC AGAAAAACAT GTCTACTGAA TTAAAACGTC GTTATGCACA ACGTTTATTA CAGTTTCCAC 1020 1080 ATGTACACAA TAAAGAATAC TTGAAATCTT ATGCTAAAAA CCCTAAAGAA ACTAAAGRTA 1140 GTTATATTC TGGKTTTWAA RAGAGATCAA TTGATTAAAA TAGAAGCGAT TAAATCATTG 1200 TTTGCAATGG ATAAATCTCC ATTAGAACAT GTTAAACCCT GCTACAAAAC CAGACGCTTC TTGGGATGAG ATGAAACAAA AAGCAGTTGA AATTGGTAAA GCTGATACTA CATCGAATAA 1260 1320 ATTTGGTATT AGAGATCAAT ACTGGAAATT AATTCCAAGA AAGTAAGCCG TTAAAGTTAG ACGTTGACTA CGAATTCMAT GTTWATTCTC CCAGAATTCC MAGATTTAGA ATTACTTGTW AAAAMMATGC KTGCTGCTGG TGCAGATGTT CAATATGTAA GTATTCCATC AAACGGTGTA TGGTATGACC ACATTGGTAT CGATAAAGAA CGCCGTCAAG CAGTTTATAA AAAAATCCAT 1440 1500 1560 TCTACTGTTG TAGATAATGG TGGTAAAATT TACGATATGA CTGATAAAGA TTATGAAAAA 1620 TATGTTATCA GTGATGCCGT ACACATCGGT TGGAAAGGTT GGGTTTATAT GGATGAGCAA
ATTGCGAAAC ATATGAAAGG TGAACCACAA CCTGAAGTAG ATAAACCTAA AAATTAAAAT
ACAAATAGCA CATAACTCAA CGATTTTGAT TGAGCGTATG TGCTATTTTT ATATTTTAAA 1680 1740 1800 TTTCATAGAA TAGAATAGTA ATATGTGCTT GGATATGTGG CAATAATAAA ATAATTAATC 1860 AGATAAATAG TATAAAATAA CTTTCCCATC AGTCCAATTT GACAGCGAAA AAAGACAGGT AATAACTGAT TATAAATAAT TCAGTATTCC TGTCTTTGTT GTTATCATA ATATGTTCTG TTAACTTAAT ATCTTTATAT TAGAATACTT GTTCTACTTC TATTACACCA GGCACTTCTT 1920 1980 CGTGTAATGC ACGCTCAATA CCAGCTTTAA GAGTGATTGT AGAACTTGGG CATGTACCAC ATGCACCATG TAATTGTAAT TTAACAATAC CGTCTTCCAC GTCAATCAAT GAGCAGTCGC CACCATCACG TAATAAAAAT GGACGAAGAC GTTCAATAAC TTCTGCTACT TGATCGACCT 2100 2160 2220 GCAGGCATGC AAGC 2234

#### (2) INFORMATION FOR SEQ ID NO: 76:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3305 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 76:

GAGCTCGGTA CCCGGGGATC CTCTAGAGTC GATCCAATGA AAATAATATA TTTTTCATTT 60 ACTGGAAATG TCCGTCGTTT TATTAAGAGA ACAGAACTTG AAAATACGCT TGAGATTACA 120 GCAGAAAATT GTATGGAACC AGTTCATGAA CCGTTTATTA TCGTTACTGG CACTATTGGA
TTTGGAGAAG TACCAGAACC CGTTCAATCT TTTTTAGAAG TTAATCATCA ATACATCAGA
GGTGTGGCAG CTAGCGGTAA TCGAAATTGG GGACTAAATT TCGCAAAAGC GGGTCGCACG 180 240 ATATCAGAAG AGTATAATGT CCCTTTATTA ATGAAGTTTG AGTTACATGG GAAAAAACAA 360 AGACGTTATT GAATTTAAGA ACAAGGTGGG TAATTTTAAT GAAAACCATG GAAGAGAAAA AGTACAATCA TATTGAATTA AATAATGAGG TCACTAAACG AAGAGAAGAT GGATTCTTTA 420 480 GTTTAGAAAA AGACCAAGAA GCTTTAGTAG CTTATTTAGA AGAAGTAAAA GACAAAACAA 540 TCTTCTTCGA CACTGAAATC GAGCGTWTAC GTTMTTTAGT AGACMACGAT TTTTATTTCA ATGTGTTTGA TATWTATAGT GAAGCGGATC TAATTGAAAT CACTGATTAT GCAAAATCAA TCCCGTTTAA TTTTGCAAGT TATATGTCAG CTAGTAAATT TTTCAAAGAT TACGCTTTGA 600 660 720 AAACAAATGA TAAAAGTCAA TACTTAGAAG ACTATAATCA ACACGTTGCC ATTGTTGCTT 780 TATACCTAGC AAATGGTAAT AAAGCACAAG CTAAACAATT TATTTCTGCT ATGGTTGAAC
AAAGATATCA ACCAGCGACA CCAACATTT TAAACGCAGG CCGTGCGCGT TCGTGGTGGA
GCTAGTGTTC ATTGTTTCCT TATTAGAAGT TGGATGGACA GCTTAAATTC AATTTAACTT 840 900 960 TATTGGATTC AACTGCAAAA CAATTAAGTW AAATTGGGGG CGGSGTTTGC MATTAACTTA 1020 TCTAAATTGC GTGCACGTGG TGAAGCAATT AAAGGAATTA AAGGCGTAGC GAAAGGCGTT TTACCTATTG CTAAGTCACT TGAAGGTGGC TTTAGCTATG CAGATCAACT TGGTCAACGC CCTGGTGCTG GTGCTGTGTA CTTAAATATC TTCCATTATG ATGTAGAAGA ATTTTTAGAT 1080 1140 1200 ACTAAAAAAG TAAATGCGGA TGAAGATTTA CGTTTATCTA CAATATCAAC TGGTTTAATT 1260 GTTCCATCTA AATTCTTCGA TTTAGCTAAA GAAGGTAAGG ACTTTTATAT GTTTGCACCT CATACAGTTA AAGAAGAATA TGGTGTGACA TTAGACGATA TCGATTTAGA AAAATATTAT 1320 1380 GATGACATGG TTGCAAACCC AAATGTTGAG AAAAAGAAAA AGAATGCGCG TGAAATGTTG

AATTTAATTG CGCMAACACA ATTACAATCA GGTTATCCAT ATTTAATGTT TAAAGATAAT 1500 GCTAACAGAG TGCATCCGAA TTCAAACATT GGACAAATTA AAATGAGTAA CTTATGTACG GAAATTTTCC AACTACAAGA AACTTCAATT ATTAATGACT ATGGTATTGA AGACGAAATT 1560 1620 AAACGTGATA TTTCTTGTAA CTTGGGCTCA TTAAATATTG TTAATGTAAT GGAAAGCGGA 1680 AAATTCAGAG ATTCAGTTCA CTCTGGTATG GACGCATTAA CTGTTGTGAG TGATGTAGCA 1740 AATATTCAAA ATGCACCAGG AGTTAGAAAA GCTAACAGTG AATTACATTC AGTTGKTCTT 1800 GGGTGTGATG AATTWACACG GTTACCTAGC AAAAAATAAA ATTGGTTATG AGTCAGAAGA 1860 AGCAAAAGAT TTTGCAAATA TCTTCTTTAT GATGATGAAT TTCTACTCAA TCGAACGTTC 1920 AATGGAAATC GCTAAAGAGC GTGGTATCAA ATATCAAGAC TTTGAAAAGT CTGATTATGC TAATGGCAAA TATTCGAGT TCTATACAAC TCAAGAATTT GAACCTCAAT TCGAAAAAGT ACGTGAATTA TTCGATGGTA TGGCTATTCC TACTTCTGAG GATTGGAAGA AACTACAACA 1980 2040 2100 AGATGTTGAA CAATATGGTT TATATCATGC ATATAGATTA GCAATTGCTC CAACACAAAG 2160 TATTTCTTAT GTTCAAAATG CAACAAGTTC TGTAATGCCA ATCGTTGACC AAATTGAACG 2220 TCGTACTTAT GGTAAATGCG GAAACATTTT ACCCTATGCC ATTCTTATCA CCACAAACAA 2280 TGTGGTACTA CAAATCAGCA TTCAATACTG ATCAGATGAA ATTAATCGAT TTAATTGCGA 2340 CAATTCAAAC GCATATTGAC CAAGGTATCT CAACGATCCT TTATGTTAAT TCTGAAATTT 2400 CTACACGTGA GTTAGCAAGA TTATATGTAT ATGCGCACTA TAAAGGATTA AAATCACTTT ACTATACTAG AAATAAATTA TTAAGTGTAG AAGAATGTAC AAGTTGTTCT ATCTAACAAT 2460 2520 TAAATGTTGA AAATGACAAA CAGCTAATCA TCTGGTCTGA ATTAGCAGAT GATTAGACTG 2580 CTATGTCTGT ATTTGTCAAT TATTGAGTAA CATTACAGGA GGAAATTATA TTCATGATAG 2640 CTGTTAATTG GAACACACA GAAGATATGA CGAATATGTT TTGGAGACAA AATATATCTC AAATGTGGGT TGAAACAGAA TTTAAAGTAT CAAAAGACAT TGCAAGTTGG AAGACTTTAT CTGAAGCTGA ACAAGACACA TTTAAAAAAAG CATTAGCTGG TTTAACAGGC TTAGATACAC 2700 2760 2820 ATCAAGCAGA TGATGGCATG CCTTTAGTTA TGCTACATAC GACTGACTTA AGGAAAAAAG 2880 CAGTTTATTC ATTTATGGCG ATGATGGAGC AAATACACGC GAAAAGCTAT TCACATATTT 2940 TCACAACACT ATTACCATCT AGTGAAACAA ACTACCTATT AGATGAATGG GTTTTAGAGG 3000 AACCCCATTT AAAATATAAA TCTGATAAAA TTGTTGCTAA TTATCACAAA CTTTGGGGTA 3060 AAGAAGCTTC GATATACGAC CAATATATGG CCAGAGTTAC GAGTGTATTT TTAGAAACAT TCTTATTCTT CTCAGGTTTC TATTATCCAC TATATCTTGC TGGTCAAGGG AAAATGACGA CATCAGGTGA AATCATTCGT AAAATTCTTT TAGATGAATC TATTCATGGT GTATTTACCG 3120 3180 3240 GTTTAGATGC ACAGCATTTA CGAAATGAAC TATCTGAAAG TGAGAAACAA AAAGCAGATC 3300 3305 GACCT

## (2) INFORMATION FOR SEQ ID NO: 77:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1945 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 77:

TTGATAGTTT ATTGGAGAGA AAGAAGTATT AATCAAGTCG AAATCGTTGG TGTATGTACC 60 GATATTTGCG TGTTACATAC AGCAATTTCT GCATACAACT TAGGTTATAA AATTTCAGTA CCTGCTGAGG GAGTGGCTTC ATTTAATCAA AAAGGGCATG AATGGGCACT TGCACATTTC 120 AAAAACTCAT TAGGTGCAGA GGTAGAACAA CACGTTTAAA TCGTGCTAAA ATAATTATAA 240 AGAATACAAT TTACAAGGGA GATATTTGAC AATGGCTAAA ACATATATTT TCGGACATAA GAATCCAGAC ACTGATGCAA TTTCATCTGC GATTATTATG GCAGAATTTG AACAACTTCG 300 360 AGGTAATTCA GGAGCCAAAG CATACCGTTT AGGTGATGTG AGTGCARAAA CTCAATTCGC 420 480 GTTAGATACA TTTAATGTAC CTGCTCCGGA ATTATTAACA GATGATTTAG ATGGTCAAGA TGTTATCTTA GTTGATCATA ACGAATTCCA ACAAAGTTCT GATACGATTG CCTCTGCTAC AATTAAGCAT GTAATTGATC ATCACAGAAT TGCAAATTTC GAAACTGCTG GTCCTTTATG TTATCGTGCT GAACCAGTTG GTTGTACAGC TACAATTTA TACAAAATGT TTAGAGAACG 540 600 660 TGGCTTTGAA ATTAAACCTG AAATTGCCGG TTTAATGTTA TCAGCAATTA TCTCAGATAG 720 CTTACTTTC AAATCACAAC ATGTACACAA CAAGATGTTA AAGCAGCTGA AGAATTAAAA GATATTGCTA AAGTTGATAT TCAAAAGTAC GGCTTAGATA TGTTAAAAGC AGGTGCTTCA 780 840 ACAACTGATA AATCAGTTGA ATTCTTATTA AACATGGATG CTAAATCATT TACTATGGGT 900 GACTATGKGA YTCGTATTGC AACAAGTTAA TGCTGTTGAC CTTGACGAAG TGTTAAWTCG 960 TAAAGAAGAT TTAGAAAAAG AAATGTTAGC TGTAAGTGCA CAAGAAAAAT ATGACTTATT TGTACTTGTT GTTACKGACA TCATTAATAG TGATTCTAAA ATTTTAGTTG TAGGTGCTGA 1020 1080 AAAAGATAAA GTTGGCGAAG CATTCAATGT TCAATTAGAA GATGACATGG CCYTCTTATC 1140 TGGTGTCGTW TCTCGAAAAA AACAAATCGT ACCTCAAATC ACTGAAGCAT TAACAAAATA
ATACTATATT ACTGTCTAAT TATAGACATG TTGTATTTAA CTAACAGTTC ATTAAAGTAG
AATTTATTC ACTTTCCAAT GAACTGTTTT TTATTTACGT TTGACTAATT TACAACCCTT 1200 1260 1320 TTTCAATAGT AGTTTTTATT CCTTTAGCTA CCCTAACCCA CAGATTAGTG ATTTCTATAC AATTCCCCTT TTGTCTTAAC ATTTTCTTAA AATATTTGCG ATGTTGAGTA TAAATTTTTG 1380 1440 TTTTCTTCCT ACCTTTTCG TTATGATTAA AGTTATAAAT ATTATTATGT ACACGATTCA 1500

TCGCTCTATT	TTCAACTTTC	AACATATATA	ATTCGAAAGA	CCATTTAAAA	TTAACGGCCA	1560
CAACATTCAA	ATCAATTAAT	CGCTTTTTCC	AAAATAATCA	TATAAGGAGG	TTCTTTTCAT	1620
TATGAATATC	ATTGAGCAAA	AATTTTATGA	CAGTAAAGCT	TTTTTCAATA	CACAACAAAC	1680
TAAAGATATT	AGTTTTAGAA	AAGAGCAATT	AAAGAAGTTA	AGCAAAGCTA	TTAAATCATA	1740
CGAGAGCGAT	ATTTTAGAAG	CACTATATAC	AGATTTAGGA	AAAAATAAAG	TCGAAGCTTA	1800
TGCTACTGAA	ATTGGCATAA	CTTTGAAAAG	TATCAAAATT	GCCCGTAAGG	AACTTAAAAA	1860
CTGGACTAAA	ACAAAAAATG	TAGACACACC	TTTATATTTA	TTTCCAACAA	AAAGCTATAT	1920
CAAAAAAGAA	CCTTATGGAA	CAGTT				1945

## (2) INFORMATION FOR SEQ ID NO: 78:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2590 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 78:

TCGAACTCGG TACCCGGGGA TCCTCTAGAG TCGATCAACT ACAACTACAA TTAAACAAAT TGAGGAACTT GATAAAGTTG TAAAATAATT TTAAAAGAGG GGAACAATGG TTAAAAGGTCT 120 TAATCATTGC TCCCCTCTTT TCTTTAAAAA AGGAAATCTG GGACGTCAAT CAATGTCCTA 180 GACTCTAAAA TGTTCTGTTG TCAGTCGTTG GTTGAATGAA CATGTACTTG TAACAAGTTC 240 ATTTCAATAC TAGTGGGCTC CAAACATAGA GAAATTTGAT TTTCAATTTC TACTGACAAT 300 GCAAGTTGGC GGGGCCCAAA CATAGAGAAT TTCAAAAAGG AATTCTACAG AAGTGGTGCT 360 TTATCATGTC TGACCCACTC CCTATAATGT TTTGACTATG TTGTTTAAAT TTCAAAATAA ATATGATAGT GATATTTACA GCGATTGTTA AACCGAGATT GGCAATTTGG ACAACGCTCT 420 480 ACCATCATAT ATTCATTGAT TGTTAATTCG TGTTTGCATA CACCGCATAA GATTGCTTTT 540 TCGTTAAATG AAGGCTCAGA CCAACGCTTA ATGGCGTGCT TTTCAAACTC ATTATGGCAC 600 TTATAGCATG GATAGTATTT ATTACAACAT TTAAATTTAA TAGCAATAAT ATCTTCTTCG GTAAAATAAT GGCGACAGCG TGTTTCAGTA TCGATTAATG AACCATAAAC TTTAGGCATA 660 720 GACAAAGCTC CTTAACTTAC GATTCCTTTG GATGTTCACC AATAATGCGA ACTTCACGAT 780 TTAATTCAAT GCCAAWTTTT TCTTTGACGG TCTTTTGTAC ATAATGAATA AGGTTTTCAT 840 AATCTGTAGC AGTTCCATTG TCTACATTTA CCATAAAACC AGCGTGTTTG GTTGAAACTT CAACGCCGCC AATACGGTGA CCTTGCAAAT TAGAATCTTG TATCAATTTA CCTGCAAAAT 900 960 GACCAGGCGG TCTTTGGAAT ACACTACCAC ATGAAGGATA CTCTAAAGGT TGTTTAAATT 1020 CTCTACGTTC TGTTAAATCA TCCATTTTAG CTTGTATTTC AGTCATTTTA CCAGGAGCTA 1080 AAGTAAATGC AGCTTCTAAT ACAACTAANT GTTCTTTTTG AATAATGCTA TTACNATAAT 1140 CTAACTCTAA TTCTTTTGTT GTAAGTTTAA TTAACGAGCC TTGTTCGTTT ACGCAAAGCG 1200 CATRGTCTAT ACAATCTTTA ACTTCGCCAC CATAAGCGCC AGCATTCATA TACACTGCAC 1260 CACCAATTGA ACCTGGAATA CCACATGCAA ATTCAAGGCC AGTAAGTGCG TAATCACGAG CAACACGTGA GACATCAATA ATTGCAGCGC CGCTACCGGC TATTATCGCA TCATCAGATA 1320 1380 CTTCCGATAT GATCTAGTGA TAATAAACTA ATTACAATAC CGCGAATACC ACCTTCACGG 1440 ATAATAATAT TTGAGCCATT TCCTAAATAT GTAACAGGAA TCTCATTTTG ATAGGCATAT 1500 TTAACAACTG CTTGTACTTC TTCATTTTTA GTAGGGGTAA TGTAAAAGTC GGCATTACCA CCTGTTTTAG TATAAGTGTA TCGTTTTAAA GGTTCATCAA CTTTAATTTT TTCAKTYGRS 1560 1620 MTRARKKSWT GYAAAGCTTG ATAGATGTCT TTATTTATCA CTTCTCAGTA CATCCTTTCT 1680 CATGTCTTTA ATATCATATA GTATTATACC AATTTTAAAA TTCATTTGCG AAAATTGAAA AGRAAGTATT AGAATTAGTA TAATTATAAA ATACGGCATT ATTGTCGTTA TAAGTATTTT 1740 1800 TTACATAGTT TTTCAAAGTA TTGTTGCTTT TGCATCTCAT ATTGTCTAAT TGTTAAGCTA 1860 TGTTGCAATA TTTGGTGTTT TTTTGTATTG AATTGCAAAG CAATATCATC ATTAGTTGAT 1920 AAGAGGTAAT CAAGTGCAAG ATAAGATTCA AATGTTTGGG TATTCATTTG AATGATATGT AGACGCACCT GTTGTTTTAG TTCATGAAAA TTGTTAAACT TCGCCATCAT AACTTTCTTA 1980 2040 GTATATTTAT GATGCAAACG ATAAAACCCT ACATAATTTA AGCGTTTTTC ATCTAAGGAT 2100 GTAATATCAT GCAAATTTTC TACACCTACT AAAATATCTA AAATTGGCTC TGTTGAATAT 2160 TTAAAATGAT GCGTACCGCC AATATGTTTT GTATATTTTA CTGGGCTGTC TAAGAGGTTG AATAATAATG ATTCAATTTC AGTGTATTGT GATTGAAAAC AATTAGTTAA ATCACTATTA 2220 2280 2340 CACGATAAAG TCTGGAATAC TATAACATAA TTCATTTTCA TAATAAACAT GTTTTTGTAT 2400 AATGAATCTG TTAAGGAGTG CAATCATGAA AAAAATTGTT ATTATCGCTG TTTTAGCGAT 2460 TTTATTTGTA GTAATAAGTG CTTGTGGTAA TAAAGAAAAA GAGGCACAAC ATCMATTTAC 2520 TAAGCAATTT AAAGATGTTG AGCAAACACA WAAAGAATTA CAACATGTCA TGGATAATAT 2580 2590 **ACATTTGAAA** 

# (2) INFORMATION FOR SEQ ID NO: 79:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1019 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:

ATTCGAGCTC	GGTACCCGGG	GATCCTCTAG	AGTCGCTCGA	TAACTTCTAT	ATGAACATCA	60
TGTTTATAAT	ATGCTTTTTT	CAATAATAAC	TGAATTGCCC	CAAAAAAGTG	ATCTAATCGT	120
CCGCCTGTTG	CACCATAAAT	TGTAATACTA	TCAAATCCAA	GTGCAACAGC	TTTATCAACC	180
GCTAAAGCTA	AATCCGTATC	AGCTTTTTCA	GCTTGAACTG	GTTTGATTTG	TAACTGTTCT	240
GTTAGAAGTT	GGCGTTCTTC	TTTACTGACT	GAATCAAAGT	CTCCCACTGA	GAAAAAAGGG	300
ATAATTTGAT		AATCAAAGCA	CCTCTATCAA	CGCCGCCCCA	TTTACCTTCA	360
TTACTTTTGG	CCCAAATATC	TTGCGGCAAG	TGTCGATCAG	AACATAATAA	ATTTATATGC	420
ATATACACTC	AACCTTTCAA	TGCTTGTGTT	GACTTTTTTA	TAATCCTCTT	GTTTAAAGAA	480
AAATGAACCT	GTTACTAGCA	TTGTTAGCAC	CATTTTCAAC	ACAAACTTTC	GCTGTTATCG	540
GTATTTACGC	CTCCATCAAC	TTCAATATCA	AAGTTTAATT	GACGTTCCAT	TTTAATAGCA	600
TTAAGACCCG	CTATTTTTC	TACGCATTGA	TCAATAAATG	ATTGACCACC	AAACCCTGGG	660
		ATAATCAACA	ATGTCTAAAA	TAGGTTCAAT	TTGTGATATT	720
GGTGTACCAG	GATTAATTAC	TACACCAGCT	TTTTTATCTA	AATGTTTAAT	CATTTGAATA	780
GCACGATGAA		TTGATTCGAC	ATGAATTGNA	<b>AATCATATCG</b>	GCACCATGTT	840
CTGCAAATGA	TGCAATATAC	TTTTCTGGAA	TTTTCAATCA	TCAAATGTAC	GTCTATANGT	900
AATGTTGTGC	CTTTTCTTAC	TGCATCTAAT	ATTGGTAAAC	CAATAGATAT	ATTAGGGACA	960
	CCATAACATC	AAAATGAACT	CCGTCGAANC	CCGGCTTCTC	CAGTCGTTT	1019

## (2) INFORMATION FOR SEQ ID NO: 80:

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:

CNTGCATGCC	TGCAGGTCGA	TCTANCAAAG	CATATTAGTG	AACATAAGTC	GAATCAACCT	60
AAACGTGAAA	CGACGCAAGT	ACCTATTGTA	AATGGGCCTG	CTCATCATCA	GCAATTCCAA	120
AAGCCAGAAG	GTACGGTGTA	CGAACCAAAA	CCTAAAAAGA	AATCAACACG	AAAGATTGTG	180
CTCTTATCAC	TAATCTTTTC	GTTGTTAATG	ATTGCAÇTTG	TTTCTTTTGT	GGCAATGGCA	240
ATGTTTGGTA	ATAAATACGA	AGAGACACCT	GATGTAATCG	GGAAATCTGT	AAAAGAAGCA	300
GAGCAAATAT	TCAATAAAAA	CAACCTGAAA	TTGGGTAAAA	TTTCTAGAAG	TTATAGTGAT	360
AAATATCCTG	AAAATGAAAT	TATTAAGACA	ACTCCTAATA	CTGGTGAACG	TGTTGAACGT	420
GGTGACAGTG	TTGATGTTGT	TATATCAAAG	GGSCCTGAAA	AGGTTAAAAT	GCCAAATGTC	480
ATTGGTTTAC	CTAAGGAGGA	AGCCTTGCAG	AAATTAAAAT	CCGTTAGGTC	TTAAAGATGT	540
TACGATTGAA	AAAGTWTATA	ATAATCCAAG	CGCCMAAAGG	<b>ATACATTGCA</b>	AATCAAAKTG	600
TTAMCCGCAA	ATACTGAAAT	CGCTATTCAT	GATTCTAATA	TTAAACTATA	TGAATCTTTA	660
GGCATTAAGC	AAGTTTATGT	AGAAGACTTT	GAACATAAAT	CCTTTAGCAA	AGCTAAAAAA	720
GCCTTAGAAG	AAAAAGGGTT	TAAAGTTGAA	AGTAAGGAAG	<b>AGTATAGTGA</b>	CGATATTGAT	78.0
GAGGGTGATG	TGATTTCTCA	ATCTCCTAAA	GGAAAATCAG	TAGATGAGGG	GTCAACGATT	840
TCATTTGTTG	TTTCTAAAGG	TAAAAAAAGT	GACTCATCAG	ATGTCNAAAC	GACAACTGAA	900
TCGGTAGATG	TTCCATACAC	TGGTNAAAAT	GATAAGTCAC	AAAAAGTTCT	GGTTTATCTT	960
NAAGATAANG	ATAATGACGG	TTCCACTGAA	AAAGGTAGTT	TCGATATTAC	TAATGATCAC	1020
GTTATAGACA	TCCTTTAAGA	ATTGAAAAAG	GGAAAACGCA	GTTTTATTGT	TAAATTGACG	1080
GTAAACTGTA	CTGAAAAAA	NTCGC				1105
			•			

# (2) INFORMATION FOR SEQ ID NO: 81:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2375 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:

				•	
AATATGACAG AACCGAT	TAAA GCCAAGTTCC	TCTCCAATCA	CTGAAAAGAT	AAAGTCAGTA	60
TGATTTTCAG GTATATA	AAAC TTCACCGTGA	TTGTATCCTT	TACCTAGTAA	CTGTCCAGAA	120
CCGATAGCTT TAAGTGA	ATTC AGTTAAATGA	TAGCCATCAC	CACTACTATA	TGTATAGGGG	180
TCAAGCCATG AATTGAT	TTCG TCCCATTTGA	TACAGTTGGA	CACCTAATAA	ATTTTCAATT	240
AATGCGGGTG CATATAG	SAAT ACCTAAAATG	ACTGTCATTG	CACCAACAAT	ACCTGTAATA	300
AAGATAGGTG CTAAGAT	TACG CCATGTTATA	CCACTTACTA	ACATCACACC	TGCAATAATA	360
GCAGCTAATA CTAATGT	AGT TCCTAGGTCA	TTTTGCAGTA	ATATTAAAAT	ACTTGGTACT	420
AACGAGACAC CAATAAT	TTTT GAAAAATAAT	AACAAATCAC	TTTGGAATGA	TTTATTGAAT	480
GTGAATTGAT TATGTCT	TAGA AACGACACGC	GCTAATGCTA	AAATTAAAAT	AATTTTCATG	540
AATTCAGATG GCTGAAT	TACT GATAGGGCCA	AACGTGTTYC	AACTTTTGGC	ACCATTGATA	600
ATAGGTGTTA TAGGTGA	ACTC AGGAATAACG	AACCAGCCTA	TTWATAWTAG	ACAGATTAAG	660
AAATACAATA AATATGT	TATA ATGTTTAATC	TTTTTAGGTG	AAATAAACAT	GATGATACCT	720
GCAAAAATTG CACCTAA	AAT GTAATAAAA	ATTTGTCTGA	TACCGAAATT	AGCACTGTAT	780
TGACCACCGC CCATTGC	CCGA GTTAATAAGC	AGAACACTGA	AAATTGCTAA	AACAGCTATA	840
GTGGCTACTA ATACCCA	AGTC TACTTTGCGA	AGCCAATGCT	TATCCGGCTG	TTGACGAGAT	900
GAATAATTCA TTGCAA	ACTC CTTTTATACT	CACTAATGTT	TATATCAATT	TTACATGACT	960
TTTTAAAAAT TAGCTAG	BAAT ATCACAGTGA	TATCAGCYAT	AGATTTCAAT	TTGAATTAGG	1020
AATAAAATAG AAGGGAA	ATAT TGTTCTGATT	ATAAATGAAT	CAACATAGAT	ACAGACACAT	1080
AAGTCCTCGT TTTTAAA	ATG CAAAATAGCA	TTAAAATGTG	ATACTATTAA	GATTCAAAGA	1140
TGCGAATAAA TCAATTA	ACA ATAGGACTAA	ATCAATATTA	ATTTATATTA	AGGTAGCAAA	1200
CCCTGATATA TCATTGO	BAGG GAAAACGAAA	TGACAAAAGA	AAATATTTGT	ATCGTTTTTG	1260
GAGGGAAAAG TGCAGAA	ACAC GAAGTATCGA	TTCTGACAGC	AYWAAATGTA	TTAAATGCAR	1320
TAGATAAAGA CAAATAT	CAT GTTGATATCA	TTTATATTAC	CAATGATGGT	GATTGGAGAA	1380
AGCAAAATAA TATTACA	AGCT GAAATTAAAT	CTACTGATGA	GCTTCATTTA	GAAAAATGGA	1440
GAGGCGCTTG AGATTTC	CACA GCTATTGAAA	GAAAGTAGTT	CAGGACAACC	ATACGATGCA	1500
GTATTCCCAT TATTACA	ATGG TCCTAATGGT	GAAGATGGCA	CGATTCAAGG	GCTTTTTGAA	1560
GTTTTGGATG TACCATA	ATGT AGGAAATGGT	GTATTGTCAG	CTGCAAGTTT	CTATGGACAA	1620
ACTTGTAATG AAACAAT	TTAT TTGAACATCG	AGGGTTACCA	CAGTTACCTT	ATATTAGTTT	1680
CTTACGTTCT GAATATO	BAAA AATATGAACA	TAACATTTTA	AAATTAGTAA	ATGATAAATT	1740
AAATTACCCA GTCTTTC	STTA AACCTGCTAA	CTTAGGGTCA	AGTGTAGGTA	TCAGTAAATG	1800
TAATAATGAA GCGGAAC	TTA AAGGAGGTAT	TAAAGAAGCA	TTCCAATTTG	ACCGTAAGCT	1860
TGTTATAGAA CAAGGCC	TTA ACGCAACGTG	AAATTGAAGT	AGCAGTTTTA	GGAAATGACT	1920
ATCCTGAAGC GACATGO			CGCGTTTTAC		1980
CAAAATATAA AGGATGO					2040
TCAATTAACG GCTTAGA					2100
	CTTT GTAACAGAAG				2160
CAATGCCTGG ATTTACC					2220
CTTATCCAGA ATTGATT					2280
AGAAAAATAA ATACAAA		GGTTGTTATK	RTGATTAAYG	TKACMYTAWA	2340
GYAAAWTCAA TCATGGA	ATTN CCTTGTGAAA	TTGAA	•		2375

# (2) INFORMATION FOR SEQ ID NO: 82:

# (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	1543 base pairs
(B)	TYPE:	nucleic acid
·-/		single linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

AATCATTTTC	AGTTTATCAT	TAAACAAATA	TATTGAACYM	MYMAAAATGT	CATACTGATA	60
AAGATGAATG	TCACTTAATA	AGTAACTTAG	ATTTAACAAA	TGATGATTTT	TAATTGTAGA	120
AAACTTGAAA	TAATCACTTA	TACCTAAATC	TAAAGCATTG	TTAAGAAGTG	TGACAATGTT	180
AAAATAAATA	TAGTTGAATT	AATGAATTTG	TTCTAYAATT	AACAKGTTWT	WGAWTTTAAT	240
AATGAGAAAA	GAATTGACGA	AAGTAAGGTG	AATTGAATGG	TTATTCMATG	GTATCCAGGA	300
CMTATGGCGA	AAAGCCAAAA	GAGAAGTAAG	TGAACAATTA	AMAAAAGTAG	ATGTAGTGTT	360
TGAACTAGTA	GATGCAAGAA	TTCCATATAG	TTCAAGAAAC	CCTATGATAG	ATGAAGTTAT	420
TAACCAAAAA	CCACGTGTTG	TTATATTAAA	TAAAAAAGAT	ATGTCTAATT	TAAATGAGAT	480
GTCAAAATGG	GAACAATTTT	TTATTGATAA	AGGATACTAT	CCTGTATCAG	TGGATGCTAA	540
GCACGGTAAA	~AATTTAAAGA	AAGTGGAAGC	TGCAGCAATT	AAGGCGACTG	CTGAAAAATT	600
TGAACGCGAA	AAAGCGAAAG	GACTTAAACC	TAGAGCGATA	AGAGCAATGA	TCGTTGGAAT	660
TCCAAATGTT	GGTAAATCCA	CATTAATAAA	TAAACTGGCA	AAGCGTAGTA	TTGCGCAGAC	720
TGGTAATAAA	CCAGGTGTGA	CCAAACAACA	ACAATGGATT	AAAGTTGGTA	ATGCATTACA	780
ACTATTAGAC	ACACCAGGGA	TACTTTGGCC	TAAATTTGAA	GATGAAGAAG	TCGGTAAGAA	840
GTTGAGTTTA	ACTGGTGCGA	TAAAAGATAG	TATTGTGCAC	TTAGATGAAG	TTGCCATCTA	900

TGGATTAAAC	TTTTTAATTC	AAAATGATTT	AGCGCGATTA	AAGTCACATT	ATAATATTGA.	960
AGTTCCTGAA	GATGCMGAAA	TCATAGCGTG	GTTTGATGCG	ATAGGGAAAA	AACGTGGCTT	1020
AATTCGACGT	GGTAATGAAA	TTGATTACGA	AGCAGTCATT	GAACTGATTA	TTTATGATAT	1080
TCGAAATGCT	AAAATAGGAA	ATTATTGTTT	TGATATTTTT	AAAGATATGA	CTGAGGAATT	1140
AGCAAATGAC	GCTAACAATT	AAAGAAGTTA	CGCAGTTGAT	TAATGCGGTT	AATACAATAG	1200
	AAATCATGAA					1260
CTAGGCGCAG	AAAAGCGTTA	GAAAAAGAAC	AAGCTTTAAA	AGAAAAGTAT	GTTGAAATGA	1320
CTTACTTTGA	AAATGAAATA	TTAAAAGAGC	ATCCTAATGC	TATTATTTGT	GGGATTGATG	1380
AAGTTGGAAG	AGGACCTTTA	GCAGGTCCAG	TCGTTGCATG	CGCAACAATT	TTAAATTCAA	1440
ATCACAATTA	TTTGGGCCTT	GATGACTCGA	AAAAAGTACC	TGTTACGAAA	CGTCTAGAAT	1500
TAAATGAAGC	ACTAAAAAAT	GAAGTTACTG	YTTTTGCATA	TGG		1543

## (2) INFORMATION FOR SEQ ID NO: 83:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2185 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 83:

TTAAACAATT AAGAAAATCT GGTAAAGTAC CAGCASYAGT ATACGGTTAC GGTACTAAAA 60 ACGTGTCAGT TAAAGTTGAT GAAGTAGAAT TCATCAAAGT TATCCGTGAA GTAGGTCGTA 120 ACGGTGTTAT CGAATTAGGC GTTGGTTCTA AAACTATCAA AGTTATGGTT GCAGACTACC 180 AATTCGATCC ACTTAAAAAC CAAATTACTC ACATTGACTT CTTWKCAATC AATATGAGTG AAGAACGTAC TGTTGAAGTA CCAGTTCAAT TAGTTGGTGA AGCAGTAGGC GCTAAAGAAA 300 GGCGGCGTTA GTTGAACAAC CATTATTCAA CTTAGAAAGT AACTGCTACT CCAGACAATA 360 TTCCAGAAGC AATCGAAGTA GACATTACTG AATTAAACAT TAACGACAGC TTAACTGTTG 420 CTGATGTTAA AGTAACTGGC GACTTCAAAA TCGAAAACGA TTCAGCTGAA TCAGTAGTAA 480 CAGTAGTTGC TCCAACTGAA GAACCAACTG AAGAAGAAAT CGAAGCCTAT GGAAGGCGAA 540 CAMCAAACTG AAGAACCAGA AGTTGTTGGC GAAAGCAAAG AAGACGAAGA AAAAACTGAA 600 GAGTAATTTT AATCTGTTAC ATTAAAGTTT TTATACTTTG TTTAACAAGC ACTGTGCTTA 660 TTTTAATATA AGCATGGTGC TTTTKGTGTT ATTATAAAGC TTAATTAAAC TTTATWACTT 720 TGTACTAAAG TTTAATTAAT TTTAGTGAGT AAAAGACATT AAACTCAACA ATGATACATC 780 ATAAAAATTT TAATGTACTC GATTTTAAAA TACATACTTA CTAAGCTAAA GAATAATGAT 840 AATTGATGGC AATGGCGGAA AATGGATGTT GTCATTATAA TAATAAATGA AACAATTATG 900 TTGGAGGTAA ACACGCATGA AATGTATTGT AGGTCTAGGT AATATAGGTA AACGTTTTGA 960 ACTTACAAGA CATAATATCG GCTTTGAAGT CGTTGATTAT ATTTTAGAGA AAAATAATTT 1020 TTCATTAGAT AAACAAAAGT TTAAAGGTGC ATATACAATT GAACGAATGA ACGGCGATAA 1080 AGTGTTATTT ATCGAACCAA TGACAATGAT GAATTTGTCA GGTGAAGCAG TTGCACCGAT 1140 TATGGATTAT TACAATGTTA ATCCAGAAGA TTTAATTGTC TTATATGATG ATTTAGATTT AGAACAAGGA CAAGTTCGCT TAAGACAAAA AGGAAGTGCG GGCGGTCACA ATGGTATGAA 1200 1260 ATCAATTATT AAAATGCTTG GTACAGACCA ATTTAAACGT ATTCGTATTG GTGTGGGAAG 1320 ACCAACGAAT GGTATGACGG TACCTGATTA TGTTTTACAA CGCTTTTCAA ATGATGAAAT 1380 GGTAACGATG GGAAAAAGTT ATCGAACACG CAGCACGCG AATTGAAAAG TTTGTTGAAA 1440 CATCACRATT TGACCATGTT ATGAATGAAT TTAATGGTGA AKTGAAATAA TGACAATATT 1500 GACAMCSCTT ATAAAAGAAG ATAATCATTT TCAAGACCTT AATCAGGTAT TTGGACAAGC 1560 AAACACACTA GTAACTGGTC TTTCCCCGTC AGCTAAAGTG ACGATGATTG CTGAAAAATA 1620 TGCACAAAGT AATCAACAGT TATTATTAAT TACCAATAAT TTATACCAAG CAGATAAATT AGAAACAGAT TTACTTCAAT TTATAGATGC TGAAGAATTG TATAAGTATC CTGTGCAAGA 1680 1740 TATTATGACC GAAGAGTTTT CAACACAAAG CCCTCAACTG ATGAGTGAAC GTATTAGAAC 1800 TTTAACTGCG TTAGCTCCAA GGTAAGAAAG GGTTATTTAT CGTTCCTTTA AATGGTTTGA 1860 AAAAGTGGTT AACTCCTGTT GAAATGTGGC AAAATCACCA AATGACATTG CGTGTTGGTG 1920 AGGATATCGA TGTGGACCAA TTTMWWAACA AATTAGTTAA TATGGGGTAC AAACGGGAAT 1980 CCGTGGTATC GCATATTGGT GAATTCTCAT TGCGAGGAGG TATTATCGAT ATCTTTCCGC 2040 TAATTGGGGA ACCAATCAGA ATTGAGCTAT TTGATACCGA AATTGATTCT ATTCGGGATT 2100 TTGATGTTGA AACGCAGCGT TCCAAAGATA ATGTTGAAGA AGTCGATATC ACAACTGCAA 2160 GTGATTATAT CATTACTGAA GAAGT 2185

## (2) INFORMATION FOR SEQ ID NO: 84:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2525 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 84:

AATCTGTTCC	TACTACAATA	CCTTGTCGGT	TTGAAGCACC	NGAAAATNGT		60
GTTCACGCGC	TTTTTCATTT	CCTTTTTGGA	AATCTGTAAG	AACAATACCG		120
ATGATTGCAC	ACTTTGATCA	ACTGCAGGCT	TAATATTGAC	TGTTACTATT		180
CAATGAATCG	CAAAGCTTGC	TCAACTTCAT	CAGCATCTTT	TTGAACTCCA	TAAGGTAATT	240
TAACTGCAAT	AAACGTACAA	TCAATGCCTT	CTTCACGTAA	TTCGTTAACA		300
CTAGTTTTCC	AACTAATGTA	GAATCCTGTC	CTCCTGAAAT	ACCTAACACT	AAAGATTTTA	360
TAAATGAATG	TGATTGTACA	TAATTTTTTA	TAAATTGCTT	TAATTCCATA		420
CACTATCGAT	ACGCTTTTTC	ACTTTCATTT	CTTGTACAAT	AACGTCTTGT	AATTTACTCA	480
TTATCTTCTT	CCATCTCCTT	AACGTGTTCC	GCAACTTCAA			540
TCCCAACATG	CCTTGCTTAA	ATCGACTGGA	TATTCTTGTG	GATTCAGGAA		600
TCATCCCAAA	TAGATTGTAA	TCCTAGTGCT	AAATATTCAC	GTGATTCATC	TTCTGTTGGC	660
ATTTGATATA	CTAATTTACC	ATTTTCATAA	ATATTATGAT	GCAAATCAAT	GGCTTCGAAA	720
GATTTTATAA	ATTTCATTTT	ATAAGTATGC	ACTGGATGGA	ATAATTTTAA	AGGTTGTTCA	780
TCGTATGGAT	TTTCATTTTC	CAAAGTAATA	TAATCGCCTT	CTGCCTTACC	TGTTTTCTTG	840
TTTATAATGC	GATATACATT	TTTCTTACCT	GGCGTCGTAA	CCTTTTCAGC	GTTATTTGAT	900
AATTTAATAC	GATCACTATA	TGAACCATCT	TCATTTTCAA	TAGCTACAAG		960
GCACCTAATG	CTGGTTGATC	GTATCCTGTA	ATCAGCTTTG		CCAAGAATCT	1020
ACTTTTGCAC	CTTGTGCTTT	CAAACTCGTA	TTCGTTTCTT	CATCCAAATC	ATTAGAYGCG	1080
ATAATTTTAG	TTTCAGTAAA	TCCTGYTTCA		GTCTTGCYTC	TTTAGATAAA	1140
TAAGCGATAT	CTCCAGAATC	TAATCGAATA		TTAATTTTGT	CACCTAATTC	1200
TTTTGCAACT	TTTATTGCAT	TTGGCACGCC	AGATTTTAAA	GTATGGAATG	TATCTACTAG	1260
GAACACACAA	TTTTTATGTC	TTTCAGCATA	TTTTTTGAAG	GCAACATATT	CGTCTCCATA	1320
AGTTTGGACA		CATGTGTACC			ATTTTCCCCG	1380
CCCTAACATT	ACTTGTAGAA	TCAAAGCCCC	CGATGTAAGC		CCCCACAATG	1440
CTGCATCAAT	TTCTTGCGCA	CGACGTGTTA	CCAAACTCCA	•	ATTTGATGCA	1500
ATTTGACGAA	ATTCTGCTAG	CCTTTGTTGT	AATTAATGTA		CAATGTTTAA	1560
TAAAATTGTT	CTATTAATTG	CGCTTGAATC	AATGGTGCTT		CAATGGTTCG	1620
TTACCAAAGC	ATAATTCGCC	TTCTTGCATC	GAACGGATGC		TTTTAAATCT	1680
TTTAAATATG	ATAAGAAATC		CCAATAGACT	•	CAAATCAGAT	1740
TCTGAAAATC	CAAAATGTTC	TATAAAATCA	ATGACGCGTT	TTAAACCATT	AAAAACAGCA	1800
TAGCCACTAT	TAAATGGCAT	TTTTCTAAAA		ATACAGCCAT	TTTTTCATGA	1860
ATATTATCAT	TCCAATAACT	TTCAGCCATA			ATGTAACATT	1920
AAACTGTCGT		GTACACTTGT		TCGACCTAAA		1980
CATTTTATCA	TAATTCATTT	TTTTATATAC	ATAAGAGCCC			2040
TTAAAATCAA	CCAACAATTT	AATGACATAT	ACATAATTTT	TAAGAGTATT	TTAATAATGT	2100
AGACTATAAT	ATAAAGCGAG	GTGTTGTTAA			GCTTTCATAG	2160
AAAACATGTA		CATTATGAAA		CAATAAACGT		2220
TTGAACTAGA	AATAAAAGAA	ACTGGGACAT	ATACACATAC		CTTATTTATG	2280
GTGCTAAAAT	GGCTTGGCGT	AATTCAAATC	GTTGCATTGG	TCGTTTATTT		2340
TAAATGTCAT		GATGTTACTG			TCAATTACTT	2400
		AATGAAGGTA			ATATATGCTC	2460
CAAAGGATGG	ACCTAAAATT	TTCAACAATC	AATTAATTCG	CTATGCTGGC	TATGACAATT	2520
GTGGT						2525

# (2) INFORMATION FOR SEQ ID NO: 85:

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2181 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 85:

ATCGATAGGA AGAAGTACAA CGACTGAAGA TCAAACGGGT GATACATTGG AAACAAAAGG 60
TGTACACTCA GCAGATTTTA ATAAGGACGA TATTGACCGA TTGTTAGAAA GTTTTAAAGG
TATCATTGAA CAAATTCCGC CGATGTACTC ATCCGTCAAA GTAAATGGTA AAAAATTATA 180

TGAATATGCG CGTAATAATG AAACAGTTGA AAGACCAAAG CGTAAAGTTA ATATTAAAGA 240 CATTGGGCGT ATATCTGAAT TAGATTTTAA AGAAAATGAG TGTCATTTTA AAATACGCGT 300 CATCTGTGGT AAAGGTACAT ATATTAGAAC GCTAGCAACT GATATTGGTG TGAAATTAGG 360 CTTTCCGGCA CATATGTCGA AATTAACACG AATCGAGTCT GGTGGATTTG TGTTGAAAGA TAGCCTTACA TTAGAACAAA TAAAAGAACT TCATGAGCAG GATTCATTGC AAAATAAATT 480 GTTTCCTTTA GAATATGGAT TAAAGGGTTT GCCAAGCATT AAAATTAAAG ATTCGCACAT 540 AAAAAAACGT ATTTTAAATG GGCAGAAATT TAATAAAAAT GAATTTGATA ACAAAATTAA 600 AGACCAAATT GTATTTATTG ATGATGATTC AGAAAAAGTA TTAGCAATTT ATATGGTACA CCCTACGAAA AGAATCAGAA ATTAAACCTA AAAAAGTCTT TAATTAAAGG AGATAGAATT 660 720 TATGAAAGTT CATAGAAAGT GACACATCCT ATACAATCCT AAACAGTTAT ATTACAGGAG GATGTTGCAA TGGGCATTCC GGATTTTTCG ATGGCATGCA TAAAGGTCAT GACAAAGTCT 780 840 TTGATATATT AAACGAAATA GCTGAGGCAC GCAGTTTAAA AAAAGCGGTG ATGACATTTG ATCCGCATCC GTCTGTCGTG TTTGAATCCT AAAAGAAAAC GAACACGTTT TTACGCCCCT TTCAGATAAA ATCCGAAAAA TTACCCACAT GATATTGATT ATTGTATAGT GGTTAATTTT 900 960 1020 TCATCTAGGT TTGCTAAAGT GAGCGTAGAA GATTTTGTTG AAAATTATAT AATTAAAAAT AATGTAAAAG AAGTCATTGC TGGTTTTGAT TTTAACTTTT GGTAAATTTG GAAAAGGTAA TATGACTGTA ACTTCAAGAA TATGATGCGT TTAATACGAC AATTGTGAGT AAACAAGAAA TTGAAAAATTCT ACAACTTCTA TTCGTCAAGG ATTTAATCAA TGGTGAGTTG 1080 1140 1200 1260 CCAAAAAGGC GAATGGATGG CTTTTAGGCT ATATATATTT CTTATTAAAA GGCACTGTAG 1320 TGCAAGGTGA AAAAAGGGGA AGAACTATTG GCTTCCCCAA CAGCTAACAT TCAACCTAGT GATGATTATT TGTTACCTCG TAAAGGTGTT TATGCTGTTA GTATTGAAAT CGGCACTGAA 1380 1440 AATAAATTAT ATCGAGGGGT AGCTAACATA GGTGTAAAGC CAACATTTCA TGATCCTAAC 1500 AAAGCAGAAG TTGTCATCGA AGTGAATATC TTTGACTTTG AGGATAATAT TTATGGTGAA CGAGTGACCG TGAATTGGCA TCATTTCTTA CGTCCTGAGA TTAAATTTGA TGGTATCGAC CCATTAGTTA AACAAATGAA CGATGATAAA TCGCGTGCTA AATATTTATT AGCAGTTGAT 1560 1620 1680 TTTGGTGATG AAGTAGCTTA TAATATCTAG AGTTGCGTAT AGTTATATAA ACAATCTATA 1740 CCACACCTTT TTTCTTAGTA GGTCGAATCT CCAACGCCTA ACTCGGATTA AGGAGTATTC
AAACATTTTA AGGAGGAAAT TGATTATGGC AATTTCACAA GAACGTAAAA ACGAAATCAT
TAAAGAATAC CGTGTACACG AAACTGATAC TGGTTCACCA GAAGTACAAA TCGCTGTACT 1800 1860 1920 TACTGCAGAA ATCAACGCAG TAAACGAACA CTTACGTACA CACAAAAAAG ACCACCATTC 1980 ACGTCGTGGA TTATTAAAAA TGGTAGGTCG TCGTAGACAT TTATTAAACT ACTTACGTAG
TAAAGATATT CAACGTTACC GTGAATTAAT TAAATCACTT GGTATCCGTC GTTAATCTTA
ATATAACGTC TTTGAGGTTG GGGCATATTT ATGTTCCAAC CCTTAATTTA TATTAAAAAA 2040 2100 2160 GCTTTTTRCA WRYMTKMASR T

# (2) INFORMATION FOR SEQ ID NO: 86:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2423 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single

TOPOLOGY: linear

## SEQUENCE DESCRIPTION: SEQ ID NO: 86:

ACATTAAAAA GGATGAAATT TGGTCAAAGT ATTCGAGAAG AAGGTCCACA AAGCCATATG AAGAAGACTG GTACACCAAC GATGGGTGGA CTAACATTTC TATTAAGTAT TGTGATAACG
TCTTTGGTGG CTATTATATT TGTAGATCAA GCWAATCCAA TCATACTGTT ATTATTTTGTG
ACGATTGGTT TTGGGTTAAT TGGTTCTTAT ACGATGATTA TATTATTGTT GTTAAAAAGA
ATAACCAAGG TTTAACAAGT AAACAGAAGT TTTTGGCGCA AATTGGTATT GCGATTATAT 120 180 240 TCTTTGTTTT AAGTAATGTG TTTCATTTGG TGAATTTTTC TACGAGCATA CATATTCCAT TTACGAATGT AGCAATCCCA CTATCATTTG CATATGTTAT TTTCATTGTT TTTTGGCAAG 360 420 TAGGTTTTTC TAATGCAGTA AATTTAACAG ATGGTTTAGA TGGATTAGCA ACTGGACTGT 480 CAATTATCGG ATTTACAATG TATGCCATCA TGAGCTTTGT GTTAGGAGAA ACGGCAATTG 540 GTATTTCTG TATCATTATG TTGTTTGCAC TTTTAGGATT TTTACCATAT AACATTAACC CTGCTAAAGT GTTTATGGGA GATACAGGTA GCTTAGCTTT AGGTGGTATA TTTGCTACCA 600 660 TTTCAATCAT GCTTAATCAG GAATTATCAT TAATTTTTAT AGGTTTAGTA TTCGTAATTG 720 AAACATTATC TGTTATGTTA CAAGTCGCTA GCTTTAAATT GACTGGAAAG CGTATATTTA 780 AAATGAGTCC GATTCATCAT CATTTTGAAT TGATAGGATG GAGCGAATGG AAAGTAGTTA CAGTATTTTG GGCTGTTGGT CTGATTTCAG GTTTAATCGG TTTATGGATT GGAGTTGCAT 840 900 TAAGATGCTT AATTATACAG GGTTAGAAAA TAAAAATGTW TTAGTTGTCG GTTTGGCAAA AAGTGGTTAT GAAGCAGCTA AATTATTAAG TAAATTAGGT GCGAATGTAA CTGTCAATGA TGGAAAAGAC TTATCACAAG ATGCTCATGC AAAAGATTTA GAWTCTATGG GCATTTCTGT TGTAAGTGGA AGTCATCAT TAACGTTGCT TGATAATAAT CCAATAATTG TTAAAAATCC TGGAATACCC TTATACAGTA TCTATTATTG ATGAAGCAGT GAAACGAGGT TTGAAAATTT 960 1020 1080 1140 1200 TAACAGAAGT TGAGTTAAGT TATCTAATCT CTGAAGCACC AATCATAGCT GTAACGGGTA 1260 CAAATGGTAA AACGACAGTT ACTTCTCTAA TTGGAGATAT GTTTAAAAAA AGTCGCTTAA CTGGAAGATT ATCCGGCAAT ATTGGTTATG TTTGCATCTA AAGTWGCACA AGAAGTWAAG 1320 1380

CAATGTCGAA ATTGTCACCT	CAAACTCAAC GTTCGTATTA TTAGCCAGCT TTWAAYWACA ATAAATATTA CATTTAATCA GAACTCATTC AAGTTTGCTA GACGCTGTTG GCTTGTGCGA	TACTAACATT TAAAAAGCAA AAGACAAGTG AAGAAGTTGA TTAACACTGA GKGCTKGCTT TTTTCAGGAA TAATGATTCC ACCAATCATT CTTATATGGA AACTAGGTAA ATAAAGTACA GTTGGGATCA	TATTCGGCGC ATATATAAA ATAGAGTCGG TGGTATTTAT AGATCTAGTA GTATTTWAGY TAGAGCATAG AAAGCAACAA ATGGTTATGTG AAATGTTCGC TAGTCAAGGG AGATATTATA ATATAGTACT	ATCTAGATTA ATCAAACGGA AAGAATTAAA ATTAAAGATG TTGCCTGGTG TGGTGTACCT ATTGCAATAT ACACGCTAGC GTGGTTTGGA GCGATGGTTG AAATCGGTCA GAACCAAATG TTTGAAGAGC	AGAGGATTAT AGCTAAGACA RTTTTATCGT AACATAATTT ATTAAAGCAA GTTGGTACTA AACACAGTTT TCGGAGGGAA TATTCGGACA TTGAAGCCAA ATGTTGTATT GTGGAGGAA	1440 1500 1560 1620 1680 1740 1800 1920 1980 2040 2100 2220 2280
ATTGTCACCT ATTTATTGAA TGATAAAACG TACGAGGAAT	GCTTGTGCGA AGATTCCGTG AAGAACGATC	GTTGGGATCA CCCATTTACC AACAAGAATC AAAGACGGCA	ATATAGTACT ATCTTATTAA AAATGAAGAT			

## (2) INFORMATION FOR SEQ ID NO: 87:

### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2094 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:

CACATAAACC AGTTGTTGCT ATTTTAGGTG GAGCAAAAGT ATCTGACAAA ATTAATGTCA TCAAAAACTT AGTTAACATA GCTGATAAAA TTATCATCGG CGGAGGTATG GCTTATACTT TCTTAAAAGC GCAAGGTAAA GAAATTGGTA TTTCATTATT AGAAGAAGAT AAAATCGACT 180 TCGCAAAAGA TTTATTAGAA AAACATGGTG ATAAAATTGT ATTACCAGTA GACACTAAAG 240 TTGCTAAAGA ATTTTCTAAT GATGCCAAAA TCACTGTAGT ACCATCTGAT TCAATTCCAG 300 CAGACCAAGA AGGTATGGAT ATTGGACCAA ACACTGTAAA ATTATTTGCA GATGAATTAG 360 AAGGTGCGCA CACTGTTGTT ATGGAATGGA CCTATGGGTT GTTATTCGAG TTCAGTAACT 420 TTGCACAAGG TACAATTGGT GTTTGTTAAA GCAATTGCCA ACCTTAAAGA TGCCATTACG 480 ATTATCGGTG GCGGTGATTC AGCCTGCAGC AGCCATCTCT TTAGGTTTTT GAAAATGACT 540 TCACTCMTAT TTCCACTGGT GGCGGCSCKC CATTAGAKTA CCTAGAAGGT WAAGAATGCC 600 TGGTWTCMAA GCAAYCAWTA WTAAWTAATA AAGTGATAGT TTAAAGTGAT GTGGCATGTT TGTTTAACAT TGTTACGGGA AAACAGTCAA CAAGATGAAC ATCGTGTTTC ATCAACTTTT 660 720 CAAAAATATT TACAAAAACA AGGAGTTGTC TTTAATGAGA ACACCAATTA TAGCTGGTAA CTGGAAAATG AACAAAACAG TACAAGAAGC AAAAGACTTC GTCAATACAT TACCAACACT ACCAGATTCA AAAGAAKTWR AATCAGTWAT TTGTTGCMCC AGCMATTCAA TTAGATGCAT TAACTACTGC AGTTWAAGAA GGAAAAGCAC AAGGTTTAGA AATCAGTGCT CAAAATNCGT 780 840 900 960 ATTTCGAAGA AATGGGGCTT MACAGTGAAA KTTTCCAGTT GCATAGCAGA TTAGGCTTAA 1020 AAAGTTGTAT TCGGTCATTC TGAACTTCGT GAATATTCCA CGGAACCAGA TGAAGAAATT AACAAAAAAG CGCACGTATT TTCAAACATG GAATGAMTCC AATTATATGT GTTGGTGAAA 1080 1140 CAGACGAAGA GCGTGAAAGT GGTAAAGCTA ACGATGTTGT AGGTGAGCAA GTTAAAGAAA 1200 GCTGTTGCAG GTTTATCTGA AGATCAAACT TAAATCAGTT GTAATTGCTT ATGAACCAAT 1260 CTGGGCAATC GGAACTGGTA AATCATCAAC ATCTGAAGAT GCAAATGAAA TGTGTGCATT TGTACGTCAA ACTATTGCTG ACTTATCAAG CAAAGAAGTA TCAGAAGCAA CTCGTATTCA 1320 1380 ATATGGTGGT AGTGTTAAAC CTAACAACAT TAAAGAATAC ATGGCACAAA CTGATATTGA TGGGGCATTA GTAGGTGGCG CATCACTTAA AGTTGAAGAT TTCGTACAAT TGTTAGAAGG 1500 TGCAAAATAA TCATGGCTAA GAAACCAACT GCGTTAATTA TTTTAGATGG TTTTGCGAAC 1560 CGCGAAAGCG AACATGGTAA TGCGGTAAAA TTAGCAAACA AGCCTAATTT TTNGATCGGT 1620 TNATTACCAA CCAAATATCC CAACCGAACT TCAAAATTCG AAGGCGAGTG GCTTAAGATG 1680 TTGGACTACC CTGAAGGACA AATGGGTAAC TCAGAAGTTG GTCATATGAA TATCGGTGCA
GGACGTATCG TTTATCAAAG TTTAACTCGA ATCAATAAAT CAATTGAAGA CGGTGATTTC
TTTGAAAATG ATGTTTTAAA TAATGCAATT GCACACGTGA ATTCACATGA TTCAGCGTTA 1740 1800 1860 CACATCTTTG GTTTATTGTC TGACGGTGGT GTACACAGTC ATTACAAACA TTTATTTGCT 1920 TTGTTAGAAC TTGCTAAAAA ACAAGGTGTT GAAAAAGTTT ACGTACACGC ATTTTTAGAT GGCCGTGACG TAGATCAAAA ATCCGCTTTG AAATACATCG AAGAGACTGA AGCTAAATTC 1980 2040 AATGAATTAG GCATTGGTCA ATTTGCATCT GTGTCTGGTC GTTATTATGC ANTG 2094

- (2) INFORMATION FOR SEQ ID NO: 88:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 954 base pairs (B) TYPE: nucleic acid

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 88:

GGGGWYYCTC	TAGAGYCGAC	CTRCAGGCAT	SCAAGCTTBA	CCAGGWTCAA	TTAGAGGTRA	60
TTWAGGTTTA	RCTKTTSGTV	GAADTATCAT	BMTCGGTTCA	GATTCCTGAG	AGTCTGCTGA	120
ACGTGAAATT	AATCTATGGT	TTAATGAAAA	TGAAATTACT	AGCTATGCTT	CACCACGTGA	180
TGCATGGTTA	TATGAATAAA	ATATAAACTG	TAAACCTTTA	CGATTTATTT	ATAAAGGTAG	240
AAAGGGTTTT	GTTATGTGGT	TAGTCATTAT	GATTATACAT	AACAAGGCCC	GTTTTTTATG	300
TTGTAGTAAA	TTACTTGAAA	AATTTTATAG	TTTTTTGGTA	ACACGTATTA	AAAAGAGAGG	360
AATATTCTTT	ATCAAATGAA	ACTAAACAGA	GAGAAGGGGT	TGTTAAAATG	AAGAATATTA	420
TTTCGATTAT	TTTGGGGATT	TTAATGTTCT	TAAAATTAAT	GGAATTACTA	TATGGTGCTA	480
TATTTTTAGA	TAAACCACTT	AATCCTATAA	CAAAAATTAT	TTTTATACTG	ACTCTCATTT	540
ATATTTTTTA	TGTATTAGTA	AAAGAATTGA	TTATATTTTT	GAAGTCAAAG	TATAACAAAA	600
GCGCTTAACA	TATGTTTATT	TTAATATCAT	AATTTTTTTA	AACGGGACTG	ATTAACYTTT	660
ATTAATAATT	AACAGTTCGT	TCTTTTGTAT	TAAGAAATGT	AGTCAGTATA	TTATTTGCTA	720
AAGTTGCGAT	ACGATTATAT	TAAAACGGCT	AATCATTTTT	AATTAATGAT	TATATGATGC	780
AACTGTTTAG			CAGACGAATA			840
			AAATGAGATG			900
GCTTGAAAAC	AAACATTTAT	GAATGCACAA	TGAATATGAT	AAGATTAACA	ACAT	954

- (2) INFORMATION FOR SEQ ID NO: 89:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 841 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single

(D) TOPOLOGY: single linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 89:

CTTTMAWKRC	CTRAACCACT	TAACAAACCT	GCCAATAATC	GTGTTGTCGT	ACCAGAATTA	60
CCTGTATACA	ATACTTGATG	TGGCGTGTTA	AAAGATTGAT	ATCCTGGGGA	AGTCACAACT	120
AATTTTTCAT	CATCTTCTTT	GATTTCTACA	CCTAACAGTC	GGAAAATGTC	CATCGTACGA	180
CGACAATCTT	CGCCAAGTAG	TGGCTTATAT	ATAGTAGATA	CACCTTCAGC	TAGCGACGCC	240
AACATGATTG	CACGGTGTGT	CATTGACTTA	TCGCCCGGCA	CTTCTATTTC	GCCCTTTAAC	300
GGACCTGAAA	TATCAATGAT	TTGTTCATTT	ACCATTTCAT	TCACCTACTT	AAAATATGTT	. 360
TTTAATTGTT	CACATGCATG	TTGTAATGTT	AGTTGATCAA	CATGTTGTAC	AACGATATCT	420
CCAAATTGTC	TAATCAAGAC	CATTTGTACA	CCTTGCTTAT	CATTCTTTTT	ATCACTTAGC	480
ATATATTGGT	ATAACGTTTÇ	AAAATCCAAG	TCAGTTATCA	TGŤCTAAAGG	ATAGCCGAGT	540
TGTATTAAAT	ATTGAATATA	ATGATTAATA	TCATGCTTAG	RATCAAACAA	AGCATTCGCA	600
ACTATAAATT	GATAGATAAT	GCCAACCATC	ACTGACATGA	CCATGAGGTA	TTTTATGATA	660
GTATTCAACA	GCATGACCAA	ATGTATGACC	TAAATTTAAR	AATTTACGTA	CACCTTGTTC	720
TTTTTSATCT	GGCGAATAAC	AATATCCAGC	TTSGTTTCAA	TACCTTTRGS	AATWTATTTR	780
TCCATACCAT	TTAATGACTG	TAATATCTCT	CTATCTTTAA	AGTGCTGTTC	GATATCTTGC	840
G						841

- (2) INFORMATION FOR SEQ ID NO: 90:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 568 base pairs (B) TYPE: nucleic acid

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 90:

CCGGGGGATCC TCTAGAGTCG ATCTTTGCAT TCTTTAAGCT TAAATTTTCT ATTCTTCTTT 60 CTCTACGGCG CATAGCATTA ATATTACCGT AACTTATCCC AGTATCTTTA TTAATTTGAT 120

AACTCGATAT	CTCTTTGTTT	TCTATCAATT	CTTTGATTGT	ATTGAATATT	TCATCATAGC	180
AATTCATAAA	TTAGATGAGG	CGAAATTTTT	AATTTTTTAG	AATATCAATA	GTANTATAAC '	240
TAAAATGAAA	ATACCGATCG	ATAAACAAAA	AGATATTTTT	TGTTTTGTTT	CTCTTTTCAT	300
ATAGTATTAC	CCCCTTAATA	ATGCGTAGTA	AGGTCCCTCT	TTTCGGGGTC	TTACCTTANA	360
AACGTTCTGC	AAATGAATTC	GATGAGAAGT	AATATGAATA	TGGCTATTTT	CAAGTAATAC	420
TCAACGTTTT	CGCGACGTTC	TTTTATCGCC	TCATCTCATC	ACCTCCAAAT	TAAAAAT	480
TCATGTGAAC	TAAAATATAA	AATGGTCTTC	CCCAGCTTTA	AAAAAATAAA	TACATAAAAC	540
ATTTTACTTG	GACCAAAACT	TGGACCCC		,		568

# (2) INFORMATION FOR SEQ ID NO: 91:

## (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	581 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 91:

ATGCCTGCAG	GTCGATCATT	AATTAAAAAC	CCTGGCGGTG	GTTTAGCTAA	GATTGGTGGA	60
TACATTGCTG	GTAGAAAAGA	TTTAATTGAA	CGATGTGGTT	ATAGÁTTGAC	AGCACCTGGT	120
ATTGGTAAAG	AAGCGGGTGC	ATCATTAAAT	GCATTGCTTG	AAATGTATCA	AGGTTTCTTT	180
TTAGCACCAC	ACGTTGTCAG	TCAGAGTCTT	AAAGGTGCAT	TGTTTACTAG	TTTATTTTTA	240
GAAAAAATGA	ATATGAACAC	AACGCCGAAG	TACTACGAAA	AACGAACTGA	TTTAATTCAA	300
ACAGTTAAAT	TTGAAACGAA	AGAACAAATG	ATTTCATTTT	GTCAAAGTAT	TCAACACGCA	360
TCCCCAATTA	ATGCACATTT	TAGTCCANAA	CCTAGTTATA	TGCCTGGTTA	CGAAGATGAT	420
GTTATTATGG	CAGCTGGTAC	GTTTATTCAA	GGTTCATCCG	ATTGAATTAT	CTGCAGATGG	480
ACCTATTCGT	CCTCCTTATG	AAGCATATGT	TCAAGGANGA	TTAACATATG	AACACGTTAA	540
AATTGCTGTT	GACAAGANCT	GTTTAATCAG	TTTGAAAAAA	C		581

# (2) INFORMATION FOR SEQ ID NO: 92:

# (i) SEQUENCE CHARACTERISTICS:

(A)	LENGTH:	2001 base pairs
(B)	TYPE:	nucleic acid
(C)	STRANDEDNESS:	single
(D)	TOPOLOGY:	linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 92:

CGGGGATCCT	CTAAAGTCGA	TCAAATTGGG	CGAATGAAGC	AAGGAAAAAC	AATTTTAAAA	60
AAGATTTCTT	GGCAAATTGC	TAAAGGTGAT	AAATGGATAT	TATATGGGTT	GAATGGTGCT	120
GGCAAGACAA	CACTTCTAAA	TATTTTAAAT	GCGTATGAGC	CTGCAACATC	TGGAACTGTT	180
AACCTTTTCG	GTAAAATGCC	AGGCAAGGTA	GGGTATTCTG	CAGAGACTGT	ACGACAACAT	240
ATAGGTTTTG	TATCTCATAG	TTTACTGGAA	AAGTTTCAAG	AGGGTGAAAG	AGTAATCGAT	300
GTGGTGATAA	GCGGTGCCTT	TAAATCAATT	GGTGTTTATC	AAGATATTGA	TGATGAGATA	360
CGTAATGAAG	CACATCAATT	ACTTAAATTA	GTTGGAATGT	CTGCTAAAGC	GCAACAATAT	420
ATTGGTTATT	TATCTACCGG	TGAAAAACAA	CGAGTGATGA	TTGCACGAGC	TTTAATGGGG	480
CAACCCCAGG	TTTTAATTTT	AGATGAGCCA	GCAGCTGGTT	TAGACTTTAT	TGCACGAGAA	540
TCGTTGTTAA	GTATACTTGA	CTCATTGTCA	GATTCATATC	CAACGCTTGC	GATGATTTAT	600
GTGACGCACT	TTATTGAAGA	AATAACTGCT	AACTTTTCCA	AAATTTTACT	GCTAAAAGAT	660
GGCCAAAGTA	TTCAACAAGG	CGCTGTAGAA	GACATATTAA	CTTCTGAAAA	CATGTCACGA	720
TTTTTCCAGA	AAAATGTAGC	AGTTCAAAGA	TGGAATAATC	GATTTTCTAT	GGCAATGTTA	780
GAGTAAATAT	TTTGCAAATA	ATAAGTAATA	ATGACAAAAT	TTAATTAAGA	TAAAATGGAC	840
AGTGGAGGGC	AATATGGATA	ACGTTAAAAG	CAATATTTTT	GGACATGGAT	GGAACAATTT	900
TACATTGAAA	ATAATCCAAG	CATCCAACGT	WTACGAAAGA	TGTTCATTAA	TCAATTGGAG	960
AGAGAAAGGA	TATWAAGTAT	TTTTGGSCAA	CAGGACGTTC	GCATTCTGAA	ATACATCMAA	1020
YTTGTACCTC	AAGATTTTGC	GGTTAATGGC	ATCATTAGTT	CAAAŢGGAAC	AATTGGAGAA	1080
GTAGATGGAG	AAATTATCTT	CAAGCATGGT	TTATCATTGG	CTCAAGTGCA	ACAAATTACT	1140
AATTTAGCTA	AGCGCCAACA	AATTTATTAT	GAGGTATTTC	CTTTTGAAGG	TAATAGAGTT	1200
TCTTTAAAAG	AAGATGAAAC	ATGGATGCGA	GATATGATTC	GTAGTCAAGA	TCCTATTAAT	1260
GGCGTAAGTC	ATAGTGAATG	GTCTTCAAGA	CAAGATGCGC	TTGCTGGTAA	GATAGATTGG	1320
GTAACTAAGT	TTCCTGAAGG	TGAATATTCA	AAAATTTATC	TATTCAGTTC	TAATTTAGAA	1380
AAAATAACAG	CATTTAGAGA	TGAATTAAAG	CAAAATCATG	TGCAACTACA	GATTAGTGTT	1440
TCAAATTCAT	CAAGATTTAA	TGCGGAAACA	ATGGCTTATC	AAACTGATAA	AGGTACAGGC	1500
ATTAAAGAAA	TGATTGCACA	TTTTGGTATT	CATCAAGAAG	AAACGTTAGT	TATTGGAGAT	1560

AGCGACAATG	ATAGAGCAAT	GTTTGAATTT	GGTCATTATA	CAGTTGCTAT	GAAAAATGCA	1620
CGCCCTGAAA	TCCAAGCATT	AACTTCAGAT	GTAACGGCAT	ACACGAATGA	AGAGGATGGC	1680
GCAGCAAAAT	ATTTAGCAGA	GCATTTTTTA	GCTGAATAAT	AAAATAGGTA	GTTATTTATT	1740
ATTTAATTTA	CAATAGTTGA	TGAGTAATGT.	ACAAAGAGCA	GTAAAGTTAT	TTTCTATTAG	1800
AAAATGTCTT	ACTGCTCTTT	TGTATGCTTA	TAAATATTTG	AATCATCTAT	ATTTAATTGG	1860
ACAAACTCTA	TGAGAATAAA	TATTGTTAAA	ACTAATAAGA	TAGGAAATTC	ATTGATTTTG	1920
AATAATATTT	CTTGTTTTAA	GGTTTAACTA	TTGAATTGTA	TACTTCTTTT	TTTAGTAGCA	1980
ACAGATCGAC	CTGCAGGCAT	Α				2001

# (2) INFORMATION FOR SEQ ID NO: 93:

# (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2522 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 93:

	CCCGGGGATG		CGATCGCTAC	CACCTTGAAT		60
	AAATTTTGAA	TTTTCTAAGT	GTATCTTTCG	TATGCGTCAT		120
GGCGTCGCGA	TAATAATTTT	TTCAAAATCA	TTAATTAAAA	TAAATTTTTC	TAATGTATGG	180
ATTAAAATCG	GTTTGTTGTC	TAAATCTAAA	AATTGTTTAG	GTAAAGGTAC	GTTACCCATT	240
CTTGAGCCTA	TACCTCCAGC	TAGAATACCA	GCGTATTTCA	TAAAATACTT	CCTCCATTCA	300
ACTATATCTA	TATTTAATTA	TTTAAATTTC	GTTGCATTTT		ACTCATTTTA	360
AAATCAAAAC	TCTAAATGTC	TGTGTATTAC	TTAAAATTAT	ACATATTTTG	CTTATATTTT	420
AGCATATTTT	GTTTAAACCT	ATATTACATT	ATATCAGACG	TTTTCATACA	CAAATAATAA	480
CATACAAGCA	AACATTTCGT	TTATTATTTA	TATCACTTAA	CTAATTAATT	TATAATTTTT	540
TATTGTTTTT	AAGTTATCAC	TTAAAAATCG	TTTGGCAAAT	TCGTTGTGAC	GCTTGTCCAT	600
CTTCTAATGA	ACAGAATTTT	TGATAAAATA	CCGTTCGTGC	TTCAATATAC	TCATTTGCAG	660
TCTCATCGAT	TTGTTTTAAT	GCATCAATGA	GTGCTGTTTG	ATTTTCAACA	ATTGGAMCTG	720
GCAACTCTTT	TTTATAATCC	ATGTAAAAAC	CTCTAAGCTC	ATCGCCATAT	TTATCTAAGT	780
CATATGCATA	GAAAATTTGC	GGACGCTTTA	ATACACCGAA	GTCGAACATG	ACAGATGAGT	840
AGTCGGTAAC	TAACGCATCG	CTGATTAAGT	TATAAATCCG	AAATGCCTTC	ATAATCTGGA	900
AAMGTCTTTC	AACAAAATCA	TCAATGTTCA	TCAATAACGY	GTCAACAACT	AAATAATGCA	960
KGCGTAATAA	AATAACATAA	TCATCATCCA	GCGCTTGACG	CAAAGCTTCT	ATATCAAAGT	1020
TAACATTAAA	TTGATATGAA	CCCTTCTCGG	AATCGCTTCA	TCGTCAACGC	CAAGTTGGCG	1080
CGTACATAAT	CAACTTTTTT	ATCTAATGGA	ATATTTAATC	TTGTCTTAAT	ACCATTAATA	1140
TATTCAGTAT	CATTGCGTTT	ATGTGATAAT	TTATCATTTC	TTGGATAACC	TGTTTCCAAA	1200
ATCTTATCTC	GACTAACATG	AAATGCATTT	TGAAATATCG	ATGTCGAATA	TGGATTAGGT	1260
GACACTAGAT	AATCCCACCG	TTGGCTTTCT	TTTTTAAAGC	CATCTTGGTA	ATTTTGAGTA	1320
TTTGTTCCTA	GCATTTTAAC	GTTACTAATA	TCCAAACCAA	TCTTTTTTAA	TGGCGTGCCA	1380
TGCCATGTTT	GTAAGTACGT	CGTTCGCGGT	GATTTATATA	ACCAATCTGG	TGTACGTGTG	1440
TTAATCATCC	ACGCTTTCGC	TCTTGGCATC	GCTAAAAACC	ATTTCATTGA	AAACTTTGTA	1500
ACATATGGTA	CATTGTGCTG	TTGGAATATG	TGTTCATATC	CTTTTTTCAC	ACCCCATATT	1560
AATTGGGCAT	CGCTATGTTC	AGTTAAGTAT	TCATATAATG	CTTTGGGGTT	GTCGCTGTAT	1620
TGTTTACCAT	GAAAGCTTTC	AAAATAAATT	AGATTCTTGT	TTGGCAATTT	TGGATAGTAA	1680
TTTAAAAGTC	GTATATATAC	TATGTTCTAT	CAATTTTTTA	ATTGTATTTT	TAATCATGTC	1740
GTACCTCCGA	CGTGTTTTTG	TAATTATATT	AATATGTATG	AGCAAGCTCA	TTGTAACCAT	1800
GCCTATTATA	GCATTTCATC	ATAAAATACA	TTTAACCATT	ACACTTGTCG	TTAATTATCA	1860
TACGAAATAC	ATGATTAATG	TACCACTTTA	ACATAACAAA	AAATCGTTAT	CCATTCATAA	1920
CGTATGTGTT	TACACATTTA	TGAATTAGAT	AACGATTGGA	TCGATTATTT	TATTTWACAA	1980
AATGACAATT	CAGTTGGAAG	GTGATTGCTT	TTGATTGAAT	CGCCTTATGC	ATGAAAAATC	2040
AAAAGGTTAT	TCTCATTGTA	TAGTCCTGCT	TCTCATCATG	ACATGTTGCT	CACTTCATTG	2100
TCAGAACCCT	TCTTGAAAAC	TATGCCTTAT	GACTCATTTG	CATGGCAAGT	AATATATGCC	2160
AACATTAGCG	TCTAAACAAA	TCTTTGACTA	AACGTTCACT	TGAGCGACCA	TCTTGATATT	2220
TAAAATGTTT	ATCTAAGAAT	GGCACAACTT	TTTCAACCTC	ATAATCTTCA	TTGTCCAAAG	2280
CATCCATTAA	TGCATCAAAG	GACTGTACAA	TTTTACCTGG	AACAAATGAT	TCAAATGGTT	2340
CATAGAAATC	ACGCGTCGTA	ATGTAATCTT	CTAAGTCAAA	TGCATAGAAA	ATCATCGGCT	2400
TTTTAAATAC	TGCATATTCA	TATATTAAAG	ATGAATAATC	ACTAATCAAC	AAGTCTGTAA	2460
CAAAGAGAAT	ATCGTTWACT	TCASGRTCGA	TCGACTCTAG	AGGATCCCCG	GGTACCGAGC	2520
TC					,	2522

# (2) INFORMATION FOR SEQ ID NO: 94:

(i) SEQUENCE CHARACTERISTICS:

(A) 1335 base pairs LENGTH: (B) (C) nucleic acid single TYPE:

STRANDEDNESS: (D) TOPOLOGY:

linear

#### SEQUENCE DESCRIPTION: SEQ ID NO: 94: (xi)

CAGAGTTGTT	AATTCGTACT	TCAGGAGAAC	AAAGAATAAG	TAATTTCTTG	ATTTGGCAAG	60
TTTCGTATAG	TGAATTTATC	TTTAATCAAA	AATTATGGCC	TGACTTTGAC	GAAGATGAAT	120
TAATTAAATG	TATAAAAATT	TATCAGTCAC	GTCAAAGACG	CTTTGGCGGA	TTGARTGAKG	180
AGKATRTATA	GTATGAAAGT	TAGAACGCTG	ACAGCTATTA	TTGCCTTAAT	CGTATTCTTG	240
CCTATCTTGT	TAAAAGGCGG	CCTTGTGTTA	ATGATATTTG	CTAATATATT	AGCATTGATT	300
GCATTAAAAG	AAATTGTTGA	ATATGAATAT	GATTAAATTT	GTTTCAGTTC	CTGGTTTAAT	360
TAGTGCAGTT	GGTCTTATCA	TCATTATGTT	GCCACAACAT	GCAGGGCCAT	GGGTACAAGT	420
AATTCAATTA	AAAAGTTTAA	TTGCAATGAG	CTTTATTGTA	TTAAGTTATA	CTGTCTTATC	480
TAAAAACAGA	TTTAGTTTTA	TGGATGCTGC	ATTTTGCTTA	ATGTCTGTGG	CTTATGTAGG	540
CATTGGTTTT	ATGTTCTTTT	ATGAAACGAG	ATCAGAAGGA	TTACATTACA	TATTATATGC	600
CTTTTTAATT	GTTTGGCTTA	CAGATACAGG	GGCTTACTTG	TTTGGTAAAA	TGATGGGTTA	660
AACATAAGCT	TTGGCCAGTA	ATAAKTCCGA	ATAAAACAAT	CCGAAGGATY	CATAGGTGGC	720
TTGTTCTGTA	GTTTGATAGT	ACCACTTGCA	ATGTTATATT	TTGTAGATTT	CAATATGAAT	780
GTATGGATAT	TACTTGGAGT	GACATTGATT	TTAAGTTTAT	TTGGTCAATT	AGGTGATTTA	840
GTGGAATCAG	GATTTAAGCG	TCATTTNGGC	GTTAAAGACT	CAGGTCGAAT	ACTACCTGGA	900
CACGGTGGTA	TTTTAGACCG	ATTTGACAGC	TTTATGTTTG	TGTTACCATT	ATTAAATATT	960
TTATTAATAC	AATCTTAATG	CTGAGAACAA	ATCAATAAAC	GTAAAGAGGA	GTTGCTGAGA	1020
TAATTTAATG	AATCCTCAGA	ACTCCCTTTT	GAAAATTATA	CGCAATATTA	ACTTTGAAAA	1080
TTATACGCAA	TATTAACTTT	GAAAATTAGA	CGTTATATTT	TGTGATTTGT	CAGTATCATA	1140
TTATAATGAC	TTATGTTACG	TATACAGCAA	TCATTTTTAA	AATAAAAGAA	ATTTATAAAC	1200
AATCGAGGTG	TAGCGAGTGA	GCTATTTAGT	TACAATAATT	GCATTTATTA	TTGTTTTTGG	1260
TGTACTAGTA	ACTGTTCATG	AATATGGCCA	TATGTTTTT	GCGAAAAGAG	CAGGCATTAT	1320
GTGTCCAGAA	TTTGC					1335

#### (2) INFORMATION FOR SEQ ID NO: 95:

#### (i) SEQUENCE CHARACTERISTICS:

2902 base pairs LENGTH: (A) TYPE: nucleic acid (B)

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

GAGCTCGGTA	CCCGGGGATC	CTCTAGAGTC	GATCATTACC	TAATTCGTAT	TGTCGAACAA	60
TTTGATACAT	TTTACCTAAA	TCATCATATT	TACAGAAATC	ATGTAATACA	CCTGCTAATT	120
CTACTTTACT	AGTGTCTCCA	TCATAAATTT	CTGCCRATTT	AATCGCTGTT	TCTGCAACTC	180
TTAAAGAATG	ATTGATRACG	TTTCTCTGGA	CAGTTTCTCT	TTTGCAAGCC	GTTTTGCTTT	240
TTCAATGTWC	ATATAATCCT	TCCCCCTTAA	TATAGTTTTC	AACGGATTTA	GGAACAAGAA	300
CTTGGATAGA	TTTCCCTTCA	CTAACTCTTT	GTCGAATCAT	TGTCGAACTT	ATATCTACCC	360
TAGGTATCTG	AATTGCAATC	ATAGCATTTT	CAACATTTTG	ACTATTTTTG	TCTCGATTTA	420
CAACTACAAA	AGTAACCATT	TCTTTTAAGT	ATTCAATTTG	ATACCATTTC	TCTAGTTGGT	480
TATACTGATC	CGTCCCAATA	ACAAAGTACA	ACTCACTGTC	TTTGTGTTGC	TCCTTGAATG	540
CCTTGATCGT	GTCATAGGTA	TAACTTTGAC	CACCACGTTT	AATTTCATCG	TCACAAATAT	600
CTCCAAAACC	AAGCTCGTCG	ATAATCATCT	GTATCATTGT	TAATCTGTGC	TGAACGTCTA	660
TAAAATCATG	GTGCTTTTTC	AATGGAGAMA	WAAAAMWARR	WAAAAAATAA	AATTCATCTG	720
GCTGTAATTC	ATGAAATACT	TCGCTAGCTA	CTATCATATG	TTGCAGTATG	GATAGGGTTA	780
AACTGACCGC	CGTAAAGTAC	TATCTTTTTC	ATTATTATGG	CAATTCAATT	TCTTTATTAT	840
CTTTAGATTC	TCTATAAATC	ACTATCATAG	ATCCAATCAC	TTGCACTAAT	TCACTATGAA	, 900
KTAGCTTCCG	CTTAATGTTT	CCAGCTAATY	CTTTTTTATC	ATCAAAGTTT	ATTTTGTTAK	960
TACATGTTAC	TTTAATCAAT	YCTCTGTTTT	CYAACGTTAT	CATCTATTTG	TTTAATCATA	1020
TTTTCGTTGA	TACCGCCTTT	TCCAATTTGA	AAAATCGGAT	CAATATTGTG	TGCTAAACTT	1080
CTTAAGTATC	TTTTTTTTTT	GCCAGTAAGC	ATATGTTATT	CTCCTTTTAA	TTGTTGTAAA	1140
ACTGCTGTTT	TCATAGAATT	AATATCAGCA	TCTTTATTAG	TCCAAATTTT	AAAGCTTTCC	1200
GCACCCTGGT	AAACAAACAT	ATCTAAGCCA	TTATAAATAT	GGTTTCCCTT	GCGCTCTGCT	1260
TCCTCTAAAA	TAGGTGTTTT	ATACGGTATA	TAAACAATAT	CACTCATTAA	AGTATTGGGA	1320
GAAAGAGCTT	TAAATTAATA	ATACTTTCGT	TATTTCCAGC	CATACCCGCT	GGTGTTGTAT	1380
TAATAACGAT	ATCGAATTCA	GCTAAATACT	TTTCAGCATC	TGCTAATGAA	ATTTGGTTTA	1440
TATTTAAATT	CCAAGATTCA	AAACGAGCCA	TCGTTCTATT	CGCAACAGTT	AATTTGGGCT	1500
TTACAAATTT	TGCTAATTCA	TAAGCAATAC	CTTTACTTGC	ACCACCTGCG	CCCAAAATTA	1560
AAATGTATGC	ATTTTCTAAA	TCTGGATAAA	CGCTGTGCAA	TCCTTTAACA	TAACCAATAC	1620

CATCTGTATT ATACCCTATC CACTTGCCAT CTTTTATCAA AACAGTGTTA ACTGCACCTG CATTAATCGC TTGTTCATCA ACATAATCTA AATACGGTAT GATACGTTCT TTATGAGGAA 1740 TTGTGATATT AAASCCTTCT AATTYTTTTT TSGAAATAAT TTCTTTAATT AAATGAAAAA 1800 TTYTTCAATT GGGAATATTT AAAGCTTCAT AAGTATCATC TTAATCCTAA AGAATTAAAA TTTGCTCTAT GCATAACGGG CGACAAGGAA TGTGAAATAG GATTTCCTAT AACTGCAAAT 1860 1920 TTCATTTTTT TAATCACCTT ATAAAATAGA ATTYTTTAAT ACAACATCAA CATTTTTAGG AACACGAACG ATTACTTTAG CCCCTGGTCC TATAGTTATA AAGCCTAGAC CAGAGATCAT AACATCGCGT TTCTCTTTGC CTGTTTCAAG TCTAACAGCC TTTACCTCAT TAAGATCAAA ATTTTGTGGA TTTCCAGGTG GCGTTAATAA ATCGCCAAGT TGATTACGCC ATAAATCATT 2040 2100 2160 AGCCTTCTCC GTTTTAGTAC GATGTATATT CAAGTCATTA GAAAAGAAAC AAACTAACGG 2220 ACGTTTACCA CCTGAWACAT AATCTATGCG CGCTAGACCG CCGAAGAATA ATGTCKGCGC 2280 CTCATTTAAT TGATATACGC GTTGTTTTAT TTCTTTCTTA GGCATAATAA TTTTCAATYC TTTTTCACTA ACTAAATGCG TCATTTGGTG ATCTTGAATA ATACCTGGTG TATCATACAT 2340 2400 AAATGATGTT TCATCTAAAG GAATATCTAT CATATCTAAA GTTGYTTCCA GGGAATCTTG AAGTTGTTAC TACATCTTTT TCACCAACAC TAGCTTCAAT CAGTTTATTA ATCAATGTAG 2460 2520 ATTTCCCAAC ATTCGTTGTC CCTACAATAT ACACATCTTC ATTTTCTCGA ATATTCGCAA TTGATGATAA TAAGTCGTCT ATGCCCCAGC CTTTTTCAGC TGAAATTAAT ACGACATCGT 2640 CAGCTTCCAA ACCATATTT CTTGCTGTTC GTTTTAACCA TTCTTTAACT CGACGTTTAT
TAATTTGTTT CGGCAATAAA TCCAATTTAT TTGCTGCTAA AATGATTTT TTGTTTCCGA
CAATACGTTT AACTGCATTA ATAAATGATC CTTCAAAGTC AAATACATCC ACGACATTGA
CGACAATACC CTTTTTATCC GCAAGTCCTG ATAATAATTT TAAAAAGTCT TCACTTTCTA 2760 2820 2880 ATCCTACATC TTGAACTTCG TT 2902

## (2) INFORMATION FOR SEQ ID NO: 96:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1916 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 96:

AGTCGATCAA AGCCAATGTT CCAGTTGTTC CTGGTAGTGA CGGTTTAATG AAAGACGTCT CAGAAGCTAA GAAAATCGCC AAAAAAATTG GCTATCCGGT CATCATTAAA GCTACTGCTG 120 GCGGTGGCG AAAAGGTATC CGTGTTGCTC GTGATGAAAA AGAACTTGAA ACTGGCTTCC GAATGACAGA ACAAGAAGCT CAAACTGCAT TTGGTAATGG TGGACTTTAT ATGGAGAAAT TCATCGAAAA CTTCCGCCAT ATTGAAATCC AAATTGTTGG GGACAGCTAT GGTAATGTAA 240 TTCATTTAGG AGAACGTGAT TGTACAATTC AAAGACGTNT GCAGAAATTA GTGGAAGAAG CACCTTCCCC NATTTTAGAT GATGAAACAC GTCGTGAAAT GGGAAATGCC GCAGTTCGTG CAGCGAAAGC TGTAAATTAT GAAAATGCGG GAACAATTGA GTTTATATAT GATTTAAATG ATAATAAATT TTATTTTATG GAAATGAATA CACGTATTCA AGATGACAT CCTGTAACTG 360 420 480 540 600 660 720 CAGGTGGATA TGGTGTTCGA ATAGAGTCAG CATGTTATAC TAATTATACG ATACCGCCAT 780 ATTATGATTC GATGGTAGCG AAATTAATCA TACATGAACC GACACGAGAT GARGCGATTA
TGGSTGGCAT TCGTGCACTA ARKGRAWTTG TGGTTYTTGG GTATTGATAC AACTATTCCA
TTTCCATATT AAATTATTGA ATAACGGATA TATTTAGGAA GCGGTAAATT TAATACAAAC 840 900 960 TTTTTAGAAG CAAAATAGCA TTATTGAATG ATGAAAGGTT AATAGGAGGT CMATCCCMTG
GTCAAAGTAA CTGATTATTC MAATTCMAAA TTAGGTAAAG TAGAAATAGC GCCAGAAGTG
CTATCTGTTA TTGCAAGTAT AGCTACTTCG GAAGTCGAAG GCATCACTGG CCATTTTGCT 1020 1080 1140 GAATTAAAAG AAACAAATTT AGAAAAAGTT AGTCGTAAAA ATTTAAGCCG TGATTTAAAA 1200 ATCGAGAGTA AAGAAGATGG CATATATATA GATGTATATT GTGCATTAAA ACATGGTGTT AATATTTCAA AAACTGCAAA CAAAATTCAA ACGTCAATTT TTAATTCAAT TTCTAATATG 1260 1320 ACAGCGATAG AACCTAAGCA AATTAATATT CACATTACAC AAATCGTTAT TGAAAAGTAA 1380 TGTCATACCT AATTCAGTAA TTAAATAAAG AAAAATACAA ACGTTTGAAG GAGTTAAAAA 1440 TGAGTCGTAA AGAATCCCGA GTGCAAGCTT TTCAAACTTT ATTTCAATTA GAAATGAAGG 1500 ACAGTGATTT AACGATAAAT GAAGCGATAA GCTTTATTAA AGACGATAAT CCAGATTTAG ACTTCGAATT TATTCATTGG CTAGTTTCTG GCGTTAAAGA TCACGAACCT GTATTAGACG 1560 1620 AGACAATTAG TCCTTATTTA AAAGATTGGA CTATTGCACG TTTATTAAAA ACGGATCGTA 1680 TTATTTTAAG AATGGCAACA TATGAAATAT TACACAGTGA TACACCTGCT AAAGTCGTAA TGAATGAAGC AGTTGAATTA ACAAAACAAT TCAGTGATGA TGATCATTAT AAATTTATAA ATGGTGTATT GAGTAATATA AAAAAATAAA ATTGAGTGAT GTTATATGTC AGATTATTTA 1740 1800 1860 AGTGTTTCAG CTTTAACGAA ATATATTAAA TATAAATTTG ATCGACCTGC AGGCAT 1916

## (2) INFORMATION FOR SEQ ID NO: 97:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1932 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 97:

			•			
CGGGGATCCT	CTAGAGTCGA	TCCGTTTGGT	GGTGGTTTTG	GTTTCTTCGA	GTAAGTGTAA	60
GGAGGCTATG	AATTGARRAÇ	GGTCGGTGAA	GCGCTAAAAG	GTANACGTGA	AAGGTTAGGA	120
ATGACTTYAA	CAGAATTAGA	GCAACGTACT	GGAATTAANC	GTGAAATGCT	AGTGCATATT	180
GAAAATAATG	AATTCGATCA	ACTACCGAAT	AAAAATTACA	GCGAAGGATT	TATTAGAAAA	240
TATGCAAGCG	TAGTAAATAT	TGAACCTAAC	CAATTAATTC	AAGCTCATCA	AGATGAAATT	300
CCATCGAACC	AGAGCCGAAT	GGGACGAAGT	AATTACAGTT	TTCAATAGAT	AATAAAGACT	360
TACGATTATA	AGAGTAAATC	AAAGANAGCC	AATACAATTA	TTAGTAATCA	TGGGTTATTA	420
CAGTTTTAAT	AACTTTATTG	TTATGGATCA	TGTTAGTTTT	AATATTTTAA	CAGAAATAAA	480
TTAGTGAGAA	ATGAGGATGT	TATAATGAAT	ATTCCGAACC	AGATTACGGT	TTTTAGAGTT	540
AGTGTTAATA	CCAGTTTTTA	TATTGTTTGC	GTTAGTTGAT	TTTGGATTTG	GCAATGTGTC	600
ATTTCTAGGA	GGATATGAAA	TAAGAATTGA	GTTATTAATC		TTTTTATATT	660
GGCTTCCCTT	AGCGATTTTG	TTGATGGTTA	TTTAGCTAGA	AAATGGAATT	TAGTTACAAA	720
TATGGGGAAA	TTTTTGGATC	CATTAGCGGA	TAAATTATTA		CTTTAATTGT	780
ACTTGTGCAA	CTAGGACTAA	CAAATTCTGT	AGTAGCAATC	ATTATTATTG	CCAGAGAATT	840
TGCCGTAACT	GGTTTACGTT	TACTACAAAT	TGAACAAGGA	TTCCGTAAGT	TGCAGCTGGT	900
CCAATTTAGG	AAWTWAA	AACAGCCAGT	TACTATGGTT	AGCMAWTWAC	TTGGTTGTTW	960
ATTAAGKTGA	TCCCATTGGG	CAACATTGAT		ATTARGACAA	ATTTTAATTA	1020
TAACATTGGC	GTTATWTTTW	ACTATCYTAT		ATAACTTTTA	TAAAGGTAGA	1080
GATGTTTTTA	AACAAAAATA	AATATTTGTT	TATACTAGAT	TTCATTTTCA	TATGGAATCT	1140
AGTTTTTTTA	ATCCCAATTT	TAGAAATTAG	CCACGCAATT	GTTTATAATG	ATATATTGTA	1200
AAACAATATT	TGTTCATTTT	TTTAGGGAAA	ATCTGTAGTA		CATTGAATCT	1260
AAAATTGATG	TGAATTTTTA		ATGAAAAAAT	GAATTAAACG	ATACAAGGGG	1320
GATATAAATG	TCAATTGCCA		AGGCTCAGAA		GTCAAATCGC	1380
TAATACCAAC	GGACAATTTC	TATCTAAAGT		ATTGGACAAA	ATGTATTAGA	1440
ACATAAAGTT	ATTGGAGATA		TTTAGAATCA		CATGCGCTAG	1500
AAAAATATGA	TACTGTTATT	TTAACAGGTG	GCTTAGGTCC	TACGAAAGAT	GACTTAACGA	1560
AGCATACAGT	GGCCCAGATT	GTTGGTAAAG	ATTTAGTTAT	TGATGAGCCT	TCTTTAAAAT	1620
ATATTGAAAG	CTATTTTGAG	GAACAAGGAC	AAGAAATGAC	ACCTAATAAT	AAACAACAGG	1680
CTTTAGTAAT		ACTGTATTAA	CAAATCATCA	TGGCATGGCT	CCAGGAATGA	1740
TGGTGAATTT	TGAAAACAAA		TATTACCAGG	TCCACCGAAA	GAAATGCAAC	1800
	AAATGAATTG	TTGTCACATT	TTATAAACCA		ATACATTCTG	1860
		ATAGGTGAAT	CTAAAGTAGA	AACAATATTA	ATAGATCGAC	1920
CTGCAGGCAT	GC					1932

### (2) INFORMATION FOR SEQ ID NO: 98:

### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 619 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 98:

ATTCGAGCTC GGTACCCGGG GATCCTCTAN AGTCGATCTT ACGGATGAAC AATTAGTGGA 60 ATTAATGGAA AGAATGGTAT GGACTCGTAT CCTTGATCAA CGTTCTATCT CATTAAACAG 120 ACAAGGACGT TTAGGTTTCT ATGCACCAAC TGCTGGTCAA GAAGCATCAC AATTAGCGTC ACAATACGCT TTAGAAAAAG AAGATTACAT TTTACCGGGA TACAGAGATG NTCCTCAAAT TATTTGGCAT GGTTTACCAT TAACTGAAGC TTTCTTATTC TCAAGAGGTC ACTTCAAAGG 180 240 300 AAATCAATTC CCTGAAGGCG TTAATGCATT AAGCCCACAA ATTATTATCG GTGCACAATA 360 CATTCAAGCT GCTGGTGTTT GCATTTGCAC TTAAAAAACG TTGGTAAAAA TGCAGTTGCA ATCACTTACA CTGGTTGACG GTGGTTCTTC ACAAGGTTGA TTTCTACGAA GGTATTAACT 420 480 TTGCAGCCAG CTTTATAAAG CACCTGGCAA TTTTCCGTTA TTCAAAACAA TAACTATGCA 540 ATTTCAACAC CCAAGAANCA AGCNAACTGC TGCTGAAACA TTACTCAAAA ACCATTGCTG 600 TAGTTTTCCT GGTATCCAT 619

- (2) INFORMATION FOR SEQ ID NO: 99:
  - SEQUENCE CHARACTERISTICS:

LENGTH: 616 base pairs (A) nucleic acid (B) TYPE: (C) STRANDEDNESS: single

TOPOLOGY: linear (D)

SEQUENCE DESCRIPTION: SEQ ID NO: 99: (xi)

CTTGCATGCC	TGCAGGTCGA	TCANCATGTT	TAACAACAGG	TACTAATAAT	CCTCTATCAG	60
TGTCTGCTGC	AATACCGATA	TTCCAGTAAT	GTTTATGAAC	GATTTCACCA	GCTTCTTCAT	120
TGAATGAAGT	GTTAAGTGCT	GGGTATTTTT	TCAATGCAGA	AACAAGTGCT	TTAACAACAT	180
AAGGTAAGAA	TGTTAACTTA	GTACCTTGTT	CAGCTGCGAT	TTCTTTAAAT	TTCTTACGGT	240
GATCCCATAA	TGCTTGAACA	TCAATTTCAT	CCATTAATGT	TACATGAGGT	GCAGTATGCT	300
			TACGCATAGC			360
CTGGGAAGTC	GCCTTCTAAT	GTTACTGCTG	CAGGTGCTGC	AGGAGTTTCA	GCAACTTCTT	420
CACTTGTAGC	TGAAGCAGCT	GATTCATTTG	AAGCTGTTGG	TGCACCACCA	TTTAAGTATG	480
			TTTTTACCAG			540
TTTAACACCT	TTTTCACGTG	CGTTATTTAC	TTACTGAAGG	CATTGCTTTA	AACAGTCTGT	600
TTTCATCTAC	TTCCTC					616

- (2) INFORMATION FOR SEQ ID NO: 100:
  - SEQUENCE CHARACTERISTICS:

655 base pairs (A) LENGTH: TYPE: nucleic acid (B) STRANDEDNESS: (C) single

TOPOLOGY: linear (D)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

GTACCGGGGA	TCGTCACTTA	NCCTCTCTAT	TTCAATTTCA	ACTTATTTCG	TCATCAAGTA	60
TATGTGTTAT	GCTTTTATAA	CTTTGATTTC	AATTCTATCA	ATATCTGTGA	CATTGATAAC	120
ATCGGACATA	CGGTCTTCTT	GTAACTTTTT	ATCCAATTCA	AATGTATACT	TTCCATAGTA	180
TTTCTTTTTG	ACTGTAATTT	TTCCTGTACT	CATTTCACCG	TAAAGACCAT	AATTATCAAT	240
AAGGTATTTT	CTTAATTTAA	AATCAATCTC	TTTCAATGAC	ATCGCTTCTT	TATCTATTTT	300
AAATGGGAAA	AAGTCATAAT	CATATTCACC	AGTATGATCT	TCTTTAATAA	CTCTTGCTTC	360
TGCTATTAGG	TCGACAGCTT	TATCGTTTGC	ACTCGTGATA	CCCCCAATAG	AGTACTTTGC	420
ACCTTCAAAT	CTCTTATCCT	CATTAACGTA	AAATATATTA	AGAWTACGAW	KKTACACCCG	. 480
TATGATAATG	TTTGCTTATC	TTTGCCAATT	AAAGCAATAT	TATTAACAGA	ATTACCATCT	540
ATGATATTCA	TAAATTTAAT	ACTTGGTTGA	ATGAAACTGG	ATATAACCTG	TCMCATTTTT -	600
AATATTCMAT	ACTAGGTTGA	ATWATAATAA	GCTTTTAATT	TTTKGCTATT	TTCCC	655

- (2) INFORMATION FOR SEQ ID NO: 101:
  - SEQUENCE CHARACTERISTICS:

650 base pairs LENGTH: (A) (B) TYPE: nucleic acid STRANDEDNESS: single (C)

TOPOLOGY: linear (D)

SEQUENCE DESCRIPTION: SEQ ID NO: 101: (xi)

GTCGACTCTA	GAGGACTGCG	TAATAACCTA	TGAAAAATGA	TATGAGCAAC	GCCGCTCTGC	60
TTTGCCGCAT	ATACTAAATT	TTCCACTTCA	GGAATACGTT	TGAATGATGG	ATGGATAATA	. 120
CTTGGAATAA	ACACAACGGT	ATCCATTCCT	TTAAATGCTT	CTACCATGCT	TTCTTGATTA	180
AAATAATCTA	ATTGTCGAAC	AGGAACTTTT	CCGCGCCAAT	CTTCTGGAAC	TTTCTCAACA	240
TTTCTAACAC	CAATGTGAAA	ATGATCTATG	TGATTTGCAA	TGGCTTGATT	TGTAATATGT	300
GTGCCTAAAT	GACCTGTAGC	ACCTGTTAAC	ATAATATTCA	TTCACTTCAT	CTCCTAATCT	360
TTATATACAT	AACATAATAC	TTATTTGATG	GTTTTCAAAA	CATTTGATTT	TATAAAAAAT	420
			GTAAATACGT			480
ATGCCGTAAT	GACGCGTTTT	AGTTGATGTG	TTTCACTAAT	ATCATTGAAA	ATTTTAATCA	540
GGTACTACGA	CAATATGAAG	TCTGTTTTGT	GTCTGAAAAT	TTTACAGTTT	AAATAAATT	600
AATGGTATAA	GTTGTGATTT	GGTTTAAAAA	ANAATCTCGA	CGGATAANAA		650

- (2) INFORMATION FOR SEQ ID NO: 102:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2341 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

CTTGCATGCC	TGCAGGTCGA		NATCTACACC		TCAACATGAC	60
CACGNTCATG	ACGATGTATG	CGTGCGTAAW	GTCCTGTKGY	WACATAATCK		120
TCATCGCATG	ATCTAAAAAG	GCTTTAAACT	TAATTTCTTT	ATWAMACATA		180
TTGGAGTACG	ACCTTTTTTG	TATTCATCTA		AAAGACTTTA	TCCCAATATT	240
ÇTTTTTCAAA	ATTAACAGCG	TAATACGGAA	TGCCAATTTG	ATTACACACT	TCAATAACAT	300
CGTTGTAATC	TTCAGTTGCA	GTACATACGC	CATTTTCGTC	AGTGTCATCC	CAGTTTTTCA	360
TAAATATGCC	AATGACATCA	TAACCTTGTT	CTTTTAAGAC	GTGGGCTGTT	ACAGAACTAT	420
CTACACCGCC	TGACATACCA	ACGACAACAC	GTTATATCTT	TATTTGACAA	TTATGACTCC	480
TCCTTAAATT	TAAAATATAT	TTTATGAATT	TCAGCTACAA	TTGCATTAAT	TTCATTTTCA	540
GTAGTCAATT	CGTTAAAACT	AAATCGAATC	GAATGATTTG		ATCTTCGAAC	600
ATTGCATCTA	AAACATGCGA	CGGTTGTGTA	GAGCCTGCTG	TACATGCAGA	TCCAGACGAC	660
ACATAGATTT	GTGCCATATC	CAACAATGTT	AACATCGTTT	CAACTTÇAAC	AAACGGAAAA	720
TATAGATTTA	CAATATGGCC	TGTAGCATCC	GTCATTGAAC	CATTTAATTC	AAATGGAATC	780
GCTCTTTCTT	GTAATTTAAC	TAAAAATTGT	TCTTTTAAAT	TCATTAAATG	AATATTGTTA	840
TCGTCTCGAT	TCTTTTCTGC	TAATTGTAAT	.GCTTTAGCCA	TCCCAACAAT	TTGCGCAAGA	900
TTTTCAKTGC	CTAGCACGGC	GTTTCAATTC	TTGTTCACCG		GATAATCTAG	960
TGTAACATGG	TCTTTAACTA	GTAATGCACC	GACACCTTTT	GGTCCGCCAA		1020
AGTAATACTC	ATTGCGTCGA	TCTCAAATTC	GTCAAWCTTA		GTCCAATTGC	1080
TTGAACCGCA	TCAACATGGA	AATATGCATT		ATAATATCTT	GAATATCATA	1140
AATTTGTTGC	ACTGTGCCAA	CTTCATTATT	TACAAACATA	ATAGATACTA		1200
ATCTGTAATT	GTTTCTTCAA	GTTTGATCTA		ACCTGTATCA		1260
GATATGTTTA	CATCAAAACC	TYCTCGCTCT	AATTGTTCAA	AAACATGTAA	CACAGAATGA	1320
TGTTCAATCT	TCGATGTGAT	AATGTGATTA	CCCAATTGTT	CATTTGCTTT	TACTATGCCT	1380
TTAATTGCCG	TATTATTCGA	TTCTGTTGCG	CCACTCGTAA	ATATAATTTC	ATGTGTATCT	1440
GCACCAAGTA	ATTGTGCAAT	TTGACGTCTT	GACTCATCTA	AATATTTACG	CGCATCTCTT	1500
CCCTTAGCAT	GTATTGATGA	TGGATTACCA	TAATGCGAAT	TGTAAATCGT	CATCATCGCA	1560
TCTACTAACT	TCAGGTTTTA	CTGGTGTGGT	CGCAGCATAA	TCTGCATAAA		1620
TTGGACAACT	CCTCACAATT	TTATCAATGT	TCCAATAATA	GCACCTTAAC	ATACTATTTT	1680
TCTAACTTTT	CTGTTTAACT	TTATTTATAA	TGTTTTTAAT	TATATTTTAC	CATTTTCTAC	1740
ACATGCTTTT	CGATAGGCTT	TTTTAAGTTT	ATCGCTTTAT	TCTTGTCTTT	TTTATAAATT	1800
TTAGTATTTG	CAGATATTTT	TTTATTTGTA		TACTATTATT	TTGGTTATGA	1860
GCAATTTAAT	ATTTATCTGG	TTATTCGGAT	TGGTATACTT	CTTATATCAT	AAAAAAGGAA	1920
GGACGATATA	AAAATGGCGG	ATTAAATATT	CAGCAKKRAA	CCTTGTCCCT	ATTCGAGAAG	1980
GTGAAGATGA	ACAAACAGCA	ATTAATAATA	TGGTTAATCT	CGCACAACAT	TTAGACGAAT	2040
TATCATATGA	AAGATATTGG	ATTGCTGAAC	ACCATAACGC	TCCCAACCTA		2100
CAACTGCTTT	ATTAATTCAA	CATACGTTAG	AACATACGAA	ACACATACGT	GTAGGTTCTG	2160
GAGGCATCAT	GTTACCTAAT	CATGCTCCAT	TAATCGTTGC	GGAACAATTT	GGCACGATGG	2220
CAACATTATT	TCCAAATCGT	GTCGATTTAG	GATTAGGACG		ACAGATATGA	2280
TGACCGCAAG	TGCATTAAGA	CGAGATCGAC	TNTAGAGGAT	CCCCGGGTAC	CGAGCTCGAA	2340
T						2341

- (2) INFORMATION FOR SEQ ID NO: 103:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2026 base pairs (B) TYPE: nucleic acid

(C) STRANDEDNESS: single (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

AAGGAAACCA CCAACACTG CGCCAACTAA ACCKCCTGTT AGTGCAGAAA TAACGCTAAT 60
AGCCCCGCA CCTAAAGCAG CTRKNGTTTT TGTATATGCA GAAGAAAGAT ATAATGTTGC 120
AGTATCTTTA CCTGTTTCTA CATATTGAGT TTTACCCGCT CTCAATTGGT CTTCAGCTTT 180
ATATTTNTWT ATTTCTTCTW TAGTAAATAT ATCTTCCRGT TTATAACCTT TTTTCTCAAG 240
TTCATCAAAT AAATTTWGGT TACTCAAATA TATTACCTTT GCTTGAGAAT GGTCTAACTT 300

1.1

ATCTTCAGCA TGAGCTACAT CTGAATTATA GAGATAATGA AATTGGACTA ACAAATAATA CACCAGCAGC TRRTAATAAG AGATTTTTAA TTCGTTTTTC ATTAGTTTCT TTTAGATGAT TTTTGTATTT AGATTTCGTA TAAACAGAAA CTAGATTTTT TCATGATCGA CCTATCTTTT GTCCAGATAC AGTGAGACCT TGTCATTTAA ATGATTTTTA ATTCGTCTTG TACCAGAGAC TTTTCTATTA GAATTAAAAA TATTTATGAC GGCTGTTCTA TGTTTGAATC ATCTTTAGTG ATTTTATTAT CTTTTCTTTT TATAGAATCA TAATAGGTAC TTCTTAGTAT TATCAGGACT TTACACATTG NTGATACTGA ATANTGATGT GCATTCTTTT GAATGACTTC TATTTTTGCC CCATAATCAG CGCTACTTGC TTTAAAATAT CGTGCTCCAT TTTAAAATGT TGAACTTCTT
TGCGTAATTT AATCAGGTCT TTTTCTTCAT CCGATAAGTT ATCTTGGTGA TTGAATGTAC
CCGTGTTTTG ATGTTGCTTT ATCCATTTTC CTACATTTTA TAACCGCCAT TTACAAACGT
CGAAKGTGTG AAATCATACT CGCGTWTAAT TTCATTCCTA GGCTTACCAT TTTTATATAA TCTAACCATT TGTAACTTAA ACTCTGAACT AAATGATCTT CTTTCTCTTG TCATAATAAA ATCGCCTACT TTCTTAAATT AACAATATCT ATTCTCATAG AATTTGTCCA ATTAAGTGTA GACGATTCAA TCTATCAGCT AGAATCATAT AACTTATCAG AAGCAAGTGA CTGTGCWTGT ATATTTGCCG MTGATATAAT AGTAGAGTCG CCTATCTCTC AGGCGTCAAT TTAGACGCAG AGAGGAGGTG TATAAGGTGA TGCTYMTTTT CGTTCAACAT CATAGCACCA GTCATCAGTG GCTGTGCCAT TGCGTTTTTY TCCTTATTGG CTAAGTTAGA CGCAATACAA AATAGGTGAC ATATAGCCGC ACCAATAAAA ATCCCCTCAC TACCGCAAAT AGTGAGGGGA TTGGTGTATA AGTAAATACT TATTTTCGTT GTCTTAATTA TACTGCTAAT TTTTCTTTTT GTAAAATATG CAAGGTTTTA AAGAGAACA TCAAGAACTA AAAAAGGCTY TATGTCAAAT TGGACTGATG CGTTCAATAT CCGAAGTTAA GCAACTAAAC ATTGCTTAAC TTCCTTTTTA CTTTTTGGAG CGTAAAGTT TGAACATAAT AATATTCGAT TGCGCAAATG ATTGTAACTT CCATAACCAA AAGATGTACG TTTAATTAAT TTTATTTTGT TATTTATACC TTCTAAAGGA CCATTTGATA AATTGTAATA ATCAATGGTT ACACTATTAA AAGTGTCACA AATTCTTATG AATCTGGCAT AAACTTTGAA TTAACTAAAT AAGTAAGAAA ACCTCGGCAC TTTATCATTT TAATAGTGTC GAGATTTTTA TAGATACTAC AAATATTTAT AACATAGTTA AACTCATCTA ATGACTTATA TTTTTGTTC ATCACAATAT GAACAATTAT TTATTGGACG TATTTTGCTC TTTTTTTATT TCAGAAACTG ACTTAGGATT TTTATTAAAT TTTCTACCCA ATTCATCTGT ATAAGAAATA TCGGTATCAA ATTGAAAATC ATCAACAGAT CGACCTGCAG GCATGC 

# (2) INFORMATION FOR SEQ ID NO: 104:

#### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2736 base pairs (B) TYPE: nucleic acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

### (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

TGCCTGCAGG TCGATCTTCT ATGTAAATAA TCAAATGACG TTTCTTCTAT AGATATAAAT TGATATASAA AACTAAAAAT ACAACTGCAA CTATAAGATA ACAATACTAC CAAATGACAA CCTCCTTATG TAAATTATAG TTAGTTATTA CCAAAATGTA AATATACACT ATTTTTCAAG AATTGAACCG CTTTTCATT TAAATTTTTC AATATTGCTA AGCATAATTG ATGGATACTT TAACAACCCA TTACTGCTCG GCAAAATTAA TAATGGCAAG AAATTGAACC TTATAAACAC ATACGATTTA GAGCATAAAA AATAACCATG AAGCTCTACC TATTGATTAA ATARATTCTT CATGGCTATT TTAGTTTTAG TTTTATAATG CTTCAAAGTC TAATTTTGAT TTAACTTCAC TTATGAAATA CAGACTACCG GTAATTACTA ATGTATCACC TTGATAATTT TTTATAAATT CAACGTAGTC ATCTACTAAT TGTATTTCAT CATTTTCAAT ACTACCTACA ATTTCTTCTT TGCGTAACGC TTTCGGAAAA TCAAATTCAG TTGCATAAAA CGTATGCGCA ATTAAACTTA AATGTTTGAC CATCTCGTTA ATCGGTTTTC CGTTTATTGC TGASAACAAA ATATCTACTT
TTTCTTTATC ATGGTACTGT TTAATTGTAT CAATTAGAGC ATCTATACTC TCTGAATTAT
GYGCGCCATC CAAAATGATT AAAGGYTTGT CATGCACCTG CTCAATACGT CCAGTCCAAC
GAACTGATTC AATACCGTCT ATCATCTTAT TGAAATCTAA TTCAATTAAT CCTTGTTCAT TTAATTCAAT AAGAGCTGTT ATGGCTAATG CAGCAAWTTT GTTTCTGATG TTTCACCTAA CATGCTTAAA ATGATTGTTT CTAATTCATA ATCTTTATAA CGGTAAGTTA AATTCATCAT TTTGCGATAC AACAACAATT TCTCTATCTA ATTCAATGGC TTTGCATGTT GTTCAATTGC GCGTTCACGA ACATATTTTA ATGCATCTTC ATTTTTTACA GCATATATCA CTGGAACKTT AGGSTTTATA ATCGCCCYT TATCCCTAGC AATATCTAGA TAAGTACCAC CTAAAATATC
TGTATGGTCT AGACCGATAC TAGTTAAGAT TGATAAAACC GGTGTAAAGA CATTTGTCGA
ATCGTTCTTT ATACCCAATC CAGCCTCAAC AATGACAAAA TCAACAGGAT GTATTTCACC
AAAATATAAA AACATCATCG CTGTGATTAT TTCGAATTCA GTTGCAAMMM CTAAATCTGT TTCAMSTTCC ATCATTTCAA TTAACTGGTT TAATACGTGA TACTAATTCT AACAATAGCG TCATTTGATA TTGGCAACAC CATTTAGRAT AATTCGTTCA TTAAATGTTT CAATAAACGG CGACGTAAAT GTACCTACTT CATAACCATT TTCAACTAAA GCTGTTCTAA GGTAAGCAAC TGTAGAGCCT TTACCATTTG TGCCACSKAC ATGAATACCC TTAATGWTAT TTTGAGGATT ATTAAATTGT GCTAGCATCC ATTCCATACG TTTAACACCT GGTTTGATGC CAAATTTAGT TCTTTCGTGT ATCCAATACA AGCTCTCTAG GTAATTCATT GTTACTAACT CCTATGCTTT 

TAATTGTTCA ATTCTTGCCT TCACACCATC ATATTTTTCT TGATAATCTT GTTTTTACG 1740 TTTTTCTTCA TTTATACCT TTTCAGGTGC TTTACTTACA AAGTTTTCAT TAGAGAGCTT
TTTATCTACT CTATCTAATT CGCTTTGAAG TTTAGCTAAT TCTTTTTCCA AACGGCTGAT
TTCCTTATCC ATATCAATTA GCCCTTCTTA ATGGTAATAC CCACTTTACC TGCAATTACA
ACTGATGTCA TTGCTTTCTC AGGAATTTCC AACGTCAGTG CTAATATTTA AGGTACTAGG
ATTACAGAAT TTGATTAAAT AATCTTTGTT TTGTGATAAA GTTGTTTCCAA TTTCTTTATC 1800 1920 1980 2040 TTTAGCTTGA ATTAAAATAG GTATTTCTTT AGACAATGGC GTATTTACTT CTACACGTGA
TTGTCTTACA GATTTAATGA TTTCAACAAG TGGTKGCATT GTTTGTTAAC TTTCTTCAAA
AATCAATGAT TCACGCACTT CTGGCCATGA AGCTTTAACA ATTGTGTCAC CTTCATGTGG 2100 2160 2220 TAAACTTTGC CATATTTCT CTGTTACAAA TGGCATGAAT GGATGTAGCA TTCTCATAAT ATTGTCTAAA GTATAACTCA ATACTGAACG TGTAACTTGT TTTTGTTCTT CATCATTACT 2280 2340 ATTCATTGGA ATTTTACTCA TTTCAATGTA CCAATCACAG AAATCATCCC AAATGAAATT ATATAATGCA CGTCCAACTT CGCCGAATTC ATATTTGTCA CTTAAATCAG TAACTGTTGC 2400 2460 AATCGTTTCA TTTAAACGTG TTAGAATCCA TTTATCTGCT AATGATAAGT TACCACTTAA 2520 ATCGATATCT TCAACTTTAA AGTCTTCACC GATATTCATT AAACTGAAAC GTGCCCCATT 2580 CCAGATTTTA TTGATAAAGT TCCACACTGA CTCAACTTTT TCAGTTGAGT ATCTTAAATC ATGTCCTGGA GATGAACCTG TTGCTAAGAA GTAACGCAAG CTATCAGCAC CGTATTCGTC 2640 2700 AATAACATCC ATTGGATCGA CCTGCAGGCA TGCAAG 2736

#### (2) INFORMATION FOR SEQ ID NO: 105:

### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2255 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

CNCGNNAGCG ANGTNGCCGA GGATCCTCTA GAGTCNATCG GTTATCGGTG AAAAGATATG 60 TCGCATCATT GATTACTGCA CTGAGAACCG TTTACCATTT ATTCTTTTCT CTGCAAGTGG 12.0 TGGTGCACGT ATGCAAGAAG GTATTATTTC CTTGATGCAA ATGGGTAAAA CCAGTGTATC TTTAAAACGT CATTCTGACG CTGGACTATT ATATATATCA TATTTAACAC ATCCAACTAC 180 240 TGGTGGTGTA TCTGCAAGTT TTGCATCAGT TGGTGATATA AATTTAAGTG AGCCAAAAGC 300 GTTGATAGGT TTTGCAGGTC GTCGAGTTAT TGAACAGACA ATAAACGAAA AATTGCCAGA 360 TGATTTCCAA ACTGCAGAAT TTTTATTAGA GCATGGACAA TTGGATAAAG TTGTACATCG
TAATGATATG CGTCAAACAT TGTCTGAAAT TCTAAAAAATC CATCAAGAGG TGACTAAATA
ATGTTAGATT TTGAAAAACC ACTTTTTGAA ATTCGAAATA AAATTGAATC TTTAAAAGAA 420 480 540 TCTCAAGATA AAAATGATGT GGATTTACCA AAGAAGAATT TGACATGCCT TGAARCGTCM
TTGGRACGAG AAACTAAAAA AATATATACA AATCTAAAAC CATGGGATCG TGTGCAAATT
GCGCGTTTGC AAGAAAGACC TACGACCCTA GATTATATTC CATATATCTT TGATTCGTTT 600 660 720 ATGGAACTAC ATGGTGATCG TAATTTTAGA GATGATCCAG CAATGATTGG TGGTATTGGC 780 TTTTTAAATG GTCGTGCTGT TACAGTYRTK GGACAACAAC GTGGAAAAGA TACWAAAGAT RATATTTATC GAAATTTTKG GTATGGCGCA TCCAGAAGGT TATCGAAAAG CATTACGTTT AATGAAACAA GCTGAAAAAT TCAATCGTCC TATCTTTACA TTTATAGATA CAAAAGGTGC ATATCCTGGT AAAACTGCTG AAGAACGTGG ACAAAGTGAA TCTATCGCAA CAAATTTGAT 840 900 960 1020 TGAGATGGCT TCATTAAAAG TACCAGTTAT TGCGATTGTC ATTGKYGAAG GTGGCAGTGG AGGTGCTCTA GGTATTGGTA TTGCCAATAA AGYATTGATG TTAGAGAATA GTACTTACTC 1080 1140 TGWTATATCT CCTGAAGGTG CAGCGGCATT ATTATGGAAA GACAGTAATT TGGCTAAAAT 1200 YGCAGCTGAA ACAATGAAWA TTACTGCCCA TGATATTAAG CAATTAGGTA TTATAGATGA TGYCATTTCT GAACCACTTG GCGGTGCACA TAAAGATATT GAACAGCAAG CTTTAGCTAT TAAATCAGCG TTTGTTGCAC AGTTAGATTC ACTTGAGTCA TTATCAACGT GATGAAATTG 1260 1320 1380 CTAATGATCG CTTTGAAAAA TTCAGAAATA TCGGTTCTTA TATAGAATAA TCAACTTGAG 1440 CATTTTTATG TTAAATCGAT ACTGGGTTTT ACCATAAATT GAAGTACATT AAAACAATAA TTTAATATTT AGATACTGAA TTTTTAACTA AGATTAGTAG TCAAAATTGT GGCTACTAAT 1500 1560 CTTTTTTAA TTAAGTTAAA ATAAAATTCA ATATTTAAAA CGTTTACATC AATTCAATAC 1620 ATTAGTTTTG ATGGAATGAC ATATCAATTT GTGGTAATTT AGAGTTAAAG ATAAATCAGT 1680 TATAGAAAGG TATGTCGTCA TGAAGAAAAT TGCAGTTTTA ACTAGTGGTG GAGATTCACC TGGAATGAAT GCTGCCGTAA GAGCAGTTGT TCGTACAGCA ATTTACAATG AAATTGAAGT 1740 1800 TTATGGTGTG TATCATGGTT ACCAAGGATT GTTAAATGAT GATATTCATA AACTTGAATT 1860 AGGATCRAGT TGGGGATACG ATTCAGCGTG GAGGTACATT CTTGTATTCA GCAAGATGTC 1920 CAGAGTTTAA GGAGCAAGAA GTACGTAAAG TTGCAATCGA AAACTTACGT AAAAGAGGGA TTGAGGGCCT TGTAGTTATT GGTGGTGACG GTAGTTATCG CGGTGCACAA CGCATCAGTG 1980 2040 AGGAATGTAA AGAAATTCAA ACTATCGGTA TTCCTGGTAC GATTGACAAT GATATCAATG 2100 GTACTGATTT TACAATTGGA TTTGACACAG CATTAAATAC GATTATTGGC TTAGTCGACA AAATTAGAGA TACTGCGTCA AGTCACGCAC GAACATTTAT CATTGAAGCA ATGGGCCGTG 2160 2220 ATTGTGGAGT CATCTGGAGT CGACCTGCTA GTCTT 2255

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SEQUENCE CHARACTERISTICS:
            (A)
                  LENGTH:
                                              417 base pairs
                  TYPE:
            (B)
                                              nucleic acid
                  STRANDEDNESS:
            (C)
                                              single
            (D)
                  TOPOLOGY:
                                              linear
            SEQUENCE DESCRIPTION: SEQ ID NO: 106:
 GTGATGGATT AAGTCCTAAA TTTNNATTCG CTTTCTTGTC TTTTTAATCT TTTTCAGACA TTTTATCGAT TTCACGTTTT GTATACTTAG GATTTAAATA GGCATTAATT GTTTCTTGT
                                                                                     60
                                                                                    120
 CCAAAAATTG ACCATCTTGA TACAAATATT TATCTGTTGG AAATACTTCT TTACTTAAGT
                                                                                    180
 NCAATAAACC ATCTTCAAAG TCGCCGCCAT TATAACTATT TGCCATGTTA TCTTGTAAAA
                                                                                    240
 GTCCTCTTGC CTGGNTTTCT TTAAATGGTA ACAATGTACG NTAGTTATCA CCTTGTACAT TTTTATCCGT TGCAATTTCT TNTACTTGAT TTGAACTATT GTTATGTTTT NAATTATCTT
                                                                                    300
                                                                                    360
 TTCCCAGCCT GGGTCATCCT TATGGTTANC ACAAGCAGCG AGTATAAAGG TAGCTGT
                                                                                    417
(2)
     INFORMATION FOR SEQ ID NO: 107:
            SEQUENCE CHARACTERISTICS:
                                              497 base pairs
            (A)
                  LENGTH:
            (B)
                  TYPE:
                                              nucleic acid
            (C)
                  STRANDEDNESS:
                                              single
                  TOPOLOGY:
            (D)
                                              linear
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:
 TAATGTAGCA ATTACAAGGC CTGAAGAGGT GTTATATATC ACTCATGCGA CATCAAGAAT
                                                                                     60
 GTNATTTGGN CGCCCTCAGT CAAATATGCC ATCCAGNTTT TNAAAGGAAA TTCCAGAATC
                                                                                    120
 ACTATTAGAA AATCATTCAA GTGGCAAACG ACAAACGGTA CAACCTNNGG CAAAACCTTT
TNCTAAACGC GGNTTTTGTC AACGGNCAAC GTCAACGGNN AANCAAGTAT TNTNATCTGN
                                                                                    180
                                                                                    240
 TTGGAATNTT GGTGGCAANG TGGTGCNTAA NGNCNCCGGG GGGAGGCATT GTNNGTAATT
                                                                                    300
 TTAACGNGGA NAATGGCTCN NTCGGNCTNG GTNTTATNTT TTATTCACAC AGGGNCGCGN
                                                                                    360
 CANGTTTTTT TTGTNGGATT TTTTTCCCCC NTTTTTNAAA AGGNGGGGTN TTNNGGGTGG
CTGNTTTANT NGTCTCNGNG TGGNCGTGNN TCATTNNTTT TTTTTTNNA TCCAAGCCTT
                                                                                    420
                                                                                    480
 NTATGACTTT NNTTGGG
                                                                                    497
(2)
     INFORMATION FOR SEQ ID NO: 108:
    (i)
            SEQUENCE CHARACTERISTICS:
            (A) LENGTH:
                                              22 base pairs
            (B)
                  TYPE:
                                             nucleic acid
            (C)
                  STRANDEDNESS:
                                              single
            (D)
                  TOPOLOGY:
                                              linear
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:
CTGAAGAGGT GTTATATATC AC
                                                                                   22
(2)
     INFORMATION FOR SEQ ID NO: 109:
            SEQUENCE CHARACTERISTICS:
            (A)
                  LENGTH:
                                              22 base pairs
            (B)
                                             nucleic acid
                  TYPE .
            (C)
                  STRANDEDNESS:
                                              single -
            (D)
                  TOPOLOGY:
                                              linear
            SEQUENCE DESCRIPTION: SEQ ID NO: 109:
GTGATGGATT AAGTCCTAAA TT
                                                                                   22
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INFORMATION FOR SEQ ID NO: 106:

(2)

INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: 22 base pairs (A) LENGTH: nucleic acid (B) TYPE: STRANDEDNESS: (C) single (D) TOPOLOGY: (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110: 22 CTCAGTCAAA TATGCCATCC AG INFORMATION FOR SEQ ID NO: 111: SEQUENCE CHARACTERISTICS: 22 base pairs LENGTH: (A) (B) TYPE: nucleic acid STRANDEDNESS: single (C) (D) TOPOLOGY: linear SEQUENCE DESCRIPTION: SEQ ID NO: 111: 22 CTTTAAATGG TAACAATGTA CG